

TRADE, PIRACY, AND NAVAL WARFARE
IN THE CENTRAL MEDITERRANEAN:
THE MARITIME HISTORY AND ARCHAEOLOGY OF MALTA

A Dissertation

by

AYŞE DEVRİM ATAÜZ

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 2004

Major Subject: Anthropology

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ABSTRACT

Trade, Piracy, and Naval Warfare
in the Central Mediterranean:

The Maritime History and Archaeology of Malta. (May 2004)

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Located approximately in the middle of the central Mediterranean channel, the Maltese Archipelago was touched by the historical events that effected the political, economic and cultural environment of Europe, North Africa, and the Middle East. The islands were close to the major maritime routes throughout history and they were often on the border between clashing military, political, religious, and cultural entities. For these reasons, the islands were presumed to have been strategically and economically important, and, thus, frequented by ships.

An underwater archaeological survey around the archipelago revealed the scarcity of submerged cultural remains, especially pertaining to shipping and navigation. Preliminary findings elucidate a story that contrasts with the picture presented by modern history and historiography. In this sense, a comparison of the underwater archaeological data with the information gathered through a detailed study of Maltese maritime history clearly shows that the islands were attributed an exaggerated importance in historical texts, due to political and religious trends that are rooted in the period during which the islands were under the control of the Order of Saint John. An objective investigation of the historical and archaeological material provides a more balanced picture, and places the islands in a Mediterranean-wide historical

framework from the first colonization of the archipelago eight thousands years ago to the twentieth century.

To my parents

Sevil and Akın Atauz

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CHAPTER I

INTRODUCTION

Two basic factors determined almost everything in the history of the Maltese Islands: (1) they are located at the middle of the narrow passage separating the western and eastern basins of the Mediterranean Sea, and (2) they are very small.

Only two of the islands among the tiny Maltese Archipelago are large enough to have ever been inhabited: Malta and Gozo. One can see most of this tiny country from the ancient citadels located in the middle of each island. Today, the archipelago has one of the higher population densities in the world, with 400,000 inhabitants – a number that swells every summer with the addition of one million tourists. In Malta, you keep running into that woman you met on the plane, that couple who stays in your hotel, and you know where the old lady who works at the bank shops. People of small villages leave their keys on their doors since they know all their neighbors and do not want to give the rude impression that the door might be locked or closed. The crime rate is extremely low, life is uneventful, and routine social cycles are highlighted by the annual celebrations of local churches complete with huge displays of fireworks.

This dissertation follows the style and format of *Speculum*.

Despite their small size and the almost complete absence of natural resources, the Maltese Islands have a reputation of being an important commercial and military crossroads in the history of the Mediterranean. Malta is mentioned in every history book addressing the Mediterranean, from the prehistoric era to the present day. Although their size does not allow for the Maltese Islands to appear on small-scale Mediterranean maps, their location at the middle of the central channel that connects the eastern and western Mediterranean basins is nevertheless marked.

The development of a program of nautical archaeology in Malta is of crucial importance, because the archaeological record is largely incomplete due to the thin soil of the islands and the continuous occupation of the major archaeological sites. The archipelago has received all of its occupants and cultural influences, as well as its food, from the sea for the majority of its history. All of these are positive indications of the potential abundance of the underwater archaeological material around the islands. Encouraged by these promising prospects, and with an invitation from the National Museum of Archaeology in Malta, I had the opportunity to conduct the first systematic survey in the Maltese territorial waters.¹ The project continued for three seasons, the major objective being to locate and map underwater archaeological material throughout the archipelago.

The fact that we discovered an almost complete absence of shipwreck remains by the end of the third season of the survey was a bit of a surprise. Even areas such as the Grand Harbor and Marsamxett Harbor lacked the abundant harbor debris that is typical of ancient ports.² Our work in the Quarantine Hospital area (Marsamxett Harbor), however, began to yield pre-twentieth century material after nearly a week of excavation, and even then, the number of pre-nineteenth century artifacts was rather low.³ The only shipwreck site discovered during our

surveys is in hundred meters of water, and represents mixed material from three or four different periods of history in an unusually disturbed state.⁴

Our fieldwork also included the recording of the limited quantity of archaeological material in the museum collections discovered underwater either by archeologists or by amateur divers and fishermen. The low number of these finds may be due to the scarcity of underwater archaeological work conducted in Malta or to the widespread problem of looting. Three seasons of surveying certainly could not cover the entire coastline of Malta; but our team was able to study all the high potential areas using a combination of remote sensing equipment and diving surveys.

I believe that the major contribution of our underwater archaeological survey was to underscore the discrepancies between the image of Malta painted by generations of historians, and the picture emerging from an interpretation of the archaeological record in a historical context. Moreover, it was fascinating to learn how certain historical events and periods were distorted to over-emphasize and sometimes exaggerate the ‘importance,’ ‘Christianity,’ and ‘strategic significance’ of the archipelago.

Thus, a detailed study of the maritime history of Malta became unavoidable in order to make certain decisions regarding the future progress of the survey project. Several facts emerged in the early stages of research. Firstly, most of the ‘known’ shipwreck sites of Malta were based on the finds of lead anchor stocks of the Roman period or isolated amphoras sighted by divers in the 1960s.⁵ Second, for the Maltese people, the term ‘Malta Channel’ applies to the channel between Malta and Gozo, whereas for Europeans, it is generally used to refer to the channel between Malta and Sicily, or even Sicily and Tunisia. Thus, even if the historical information is accurate, the ships that are known to have been lost in the ‘Malta Channel’ can be

anywhere between Sicily and Tunisia. Third, ships embarking from Maltese ports, their commanders and their crews, may sometimes be referred to as 'Maltese' by the primary and secondary sources. This issue complicates the study of the medieval and the post medieval periods since not every ship that came from Malta was 'Maltese'. In fact, they were mostly Genoese and later, ships of the Order of Saint John, in which membership was denied the Maltese people.⁶

When it comes to the study of Maltese maritime history, one has to proceed very carefully. Accounts that mention Malta in the Roman, Byzantine, and medieval periods may be unreliable, as they were rarely written by people who had actually been to the islands. In the post medieval period, historical accounts on Malta are generally biased and tend to give a version of the truth that is distorted in varying degrees. The majority of these accounts are provided by the official historians of the Order of Saint John, and are exaggerated in an effort to emphasize the 'importance and greatness of the Knights' and 'the indispensable function' performed by their fleet in its glorious campaigns against the enemy. Almost no failure is mentioned in these accounts, and the size and number of the prizes may sometimes be exaggerated.⁷ Some historians of the Order also distorted the accounts of the previous periods in order to 'erase' the period of Muslim rule in Malta and to present its history as a continuously Christian one from the time of Saint Paul's shipwreck in the first century A.D.⁸

Although limited, the archaeological record, whenever it is available, helps to complete and correct the picture created by historians. However, in the course of my research and fieldwork, I realized that there was an additional problem with Maltese studies. There are basically two types of secondary material about Maltese history (and archaeology). In the first category are the works by European scholars, which are generally perceived as 'colonial approaches' and rejected by Maltese scholars. Such work may be general books that refer to

Malta briefly in certain sections, books that are entirely about the history of Malta with no mention of contemporary or parallel developments elsewhere in the world, or books written by the modern members of the Order of Saint John that focus on the accomplishments of the Knights.

The second category consists of works by Maltese scholars, which generally focus on the islands, but often miss the larger picture. When reading works of this type, one has to make a conscious effort to remember the size of the islands, as in many cases there are elaborate discussions about the demographic patterns, urbanization, and differences between the ‘coastal’ and ‘inland’ areas. Considering that there are very few spots in the archipelago from where one cannot actually see the sea, the distinctions and anthropological models created for larger islands and continents do not readily apply to Malta and are, at times, absurd in the Maltese context.

The following chapters endeavor to provide a comprehensive maritime history of the Maltese Archipelago, based on archaeological evidence, archival sources, primary accounts, and secondary sources. This is a first-time attempt to put Maltese history into an intra-Mediterranean framework and view its events in a larger picture. The emphasis of this study is on the ‘maritime’ dimension of Maltese history and, even though most everything in Malta has a maritime flavor, I had to exclude the majority of the impressive archaeological material from terrestrial sites as well as archival information about issues that are not directly related to the naval or commercial affairs of the islands. The period of the Order’s rule (1530-1798) extends through some of the most complex areas of world history. Many of the major external historical developments and events that ultimately had a direct effect on the Order of Saint John and Malta are mentioned only briefly and only inasmuch as they relate directly to Malta, since the space here would not allow a more detailed overview of European history.

CHAPTER II

THE MALTA PROJECT

The Maltese Islands are situated in the central Mediterranean, between Sicily and the coast of North Africa (Fig. 1). The archipelago consists of three main islands: Malta, Gozo, and Comino, and the three uninhabited islets of Cominotto, Filfla, and Saint Paul. Malta lies 350 kilometers north of Tripoli and about 290 kilometers east of Tunis. The distance from Gozo to Sicily is about 90 kilometers.



Fig. 1. Map of the Mediterranean Sea showing the location of the Maltese Archipelago. (Map: author).

The total length of the archipelago is approximately 45 kilometers. The maximum length and width of the Island of Malta is 27 kilometers and 14.5 kilometers respectively. The

archipelago has a total surface area of about 316 square kilometers and a coastline of 180 kilometers.

The islands forming the archipelago are formed entirely of sedimentary rocks deposited at the bottom of a warm, shallow sea during the Oligo-Miocene era of the Tertiary period (25 million to 30 million years ago). Today, the archipelago has no lakes, rivers, forests or mineral resources other than salt.¹ Geologically, the western and northern parts of Malta consist of a series of parallel ridges and deeply incised valleys. A large fault escarpment separates the northern part of the island from the western and eastern areas.² Various types of limestone, the most common being globigerina, are easily cut and fashioned, and characterize the general texture and color of Maltese architecture. Layers of a more porous and fissured coralline limestone are also easy to carve.³ The widespread distribution of these geological formations is the major reason for the frequent use of rock-cut and underground structures in Maltese cultures of the past.

The karst geology of the northern and western Malta is not suitable for crop cultivation nor for animal herding. Conversely, the valleys of western Malta constitute the most fertile agricultural regions of the archipelago, as this is the only area irrigated by the perennial water from the coralline hills of the east.⁴ Gozo and Comino share the same geological characteristics as northern Malta; upper coralline prevails mostly in the eastern parts of Gozo and Comino, while globigerina occurs commonly in the western parts.

Malta's climate is characterized by mild and wet winters and by extremely hot and humid summers. The average local temperature during the coldest months of the year (January-February) is 11°C, while the average temperature of the hottest months (July and August) is 34°C.⁵ The most suitable crop for this climate, and Malta's most important export product since

its introduction in the Middle Ages, is cotton. In addition, typical Mediterranean fruits and vegetables are grown in the limited agricultural lands of the archipelago.⁶

Beginnings of Underwater Archaeology in Malta

Human beings have always been interested in recovering material from the vessels lost at sea. It is likely that the people of Malta salvaged goods from wrecks around the island throughout history. It is common knowledge that ship and aircraft wrecks from underwater contexts have been salvaged from the Maltese waters in the twentieth century. In addition to efforts of clearing navigation hazards such as shallow wrecks, it is also known that salvage companies were contracted to recover unexploded ordinance from the World War II.⁷ Unfortunately records were never kept for such activities, and it is not possible to know if the salvage companies recovered archaeological objects during the period they searched the seabed.

Recovery of underwater archaeological material in Malta began in the 1960s when sport divers turned over to the National Museum of Archaeology amphoras, anchors, and shipborne artillery they had recovered. In 1967 a shipwreck in Mellicha Bay was partly excavated by a team directed by Honor Frost. The site yielded a primary cargo of *mortaria*⁸ that were almost surely manufactured in southern Italy; amphoras and glass vessels were also raised. The ship was likely a merchantman of the Severan era (ca. A.D. 200).⁹

After a lengthy hiatus, serious interest in submerged cultural resources in Maltese waters was revived by collaboration between the National Museum of Archaeology in Valletta and archaeologists from Europe. In 1988-1989 a group from Specialist Archaeology Systems (SAS) conducted a survey and identified at least two promising targets in the Grand Harbor. Unfortunately, subsequent excavation using a water dredge produced only a scatter of modern

detritus. The SAS team also surveyed extensively in Saint Paul's Bay, traditionally associated with the wreck of the Alexandrian grain vessel carrying Paul of Tarsus to his final appeal before the emperor in Rome. The search showed the virtual absence of archaeological material along Tal-Ghazzenin Reef, the suspected site of Saint Paul's shipwreck.

In 1992, the Maltese National Museum of Archaeology began a three-year period of collaboration with a team from France's *Département des recherches archéologiques subaquatiques et sous-marines* (DRASSM). A survey, conducted from 14 - 19 December 1992 in the area around Manoel Island and the *Lazzaretto* in Marsamxett Harbor, successfully determined the location of the iron ship *Carolita*. In December 1993 a joint rescue excavation by DRASSM and the National Museum of Archaeology in Marsascala Bay yielded ceramic finds ranging widely in date but having their greatest concentration in the period from the fourth to the sixth centuries A.D.¹⁰

INA Surveys in Malta

The Institute of Nautical Archaeology was first contacted in 1999 by Maltese scholars and the staff of the Museums Department to join the local efforts to carry out a survey of certain areas in the Grand and Marsamxett Harbors scheduled for marina construction. Upon this invitation, the author took up the task of investigating the maritime archaeological potential of Malta. At first, the project was limited to the specific areas of Grand Harbor, but soon after beginning our first investigations in Malta, it became clear that it was impossible to obtain meaningful results unless the entire coastline of the small archipelago was included in the survey area.

The goal of the survey project was to provide information about the commercial and naval history of Malta, the ships used for trade and naval activities, and the locations of the archaeological remains of coastal settlements that could be identified based on underwater material.

The 1999 Season

The first season of the INA Survey in Malta was a preliminary reconnaissance. Objectives included general examination of the Grand Harbor and Marsamxett Harbor (Fig. 2). The focus of this short project was the investigation of areas within the confines of the marina project that involved construction activities on parts of the Valletta waterfront, including the placement of bottom-hugging pontoons. Previous research indicated that parts of the harbor slated for marina construction were likely to contain shipwrecks, and priority was given to the selected sections of the harbor that had not been dredged. Therefore, Dockyard Creek, the main channel of the Grand Harbor, and Marsamxett Harbor were the pre-determined survey areas.

The survey of the area described above was accomplished with a Sea Scan PC high-resolution side-scan sonar, coupled with a Geometrics cesium magnetometer. This system is designed to locate large and small objects underwater in zero visibility, and was chosen for this survey due to poor visibility and silty bottom conditions of the survey areas. A GPS unit, used to give approximate longitude and latitude of the sonar targets, provided navigation for the survey. Other aspects of the survey included diver inspections of selected areas of the sea bottom to examine sonar and magnetometer targets known as anomalies. Unusual features noted in the sonar images were reviewed and the more promising targets were identified for diver verification. The diving team was equipped with hand-held magnetometers and surface communication units.

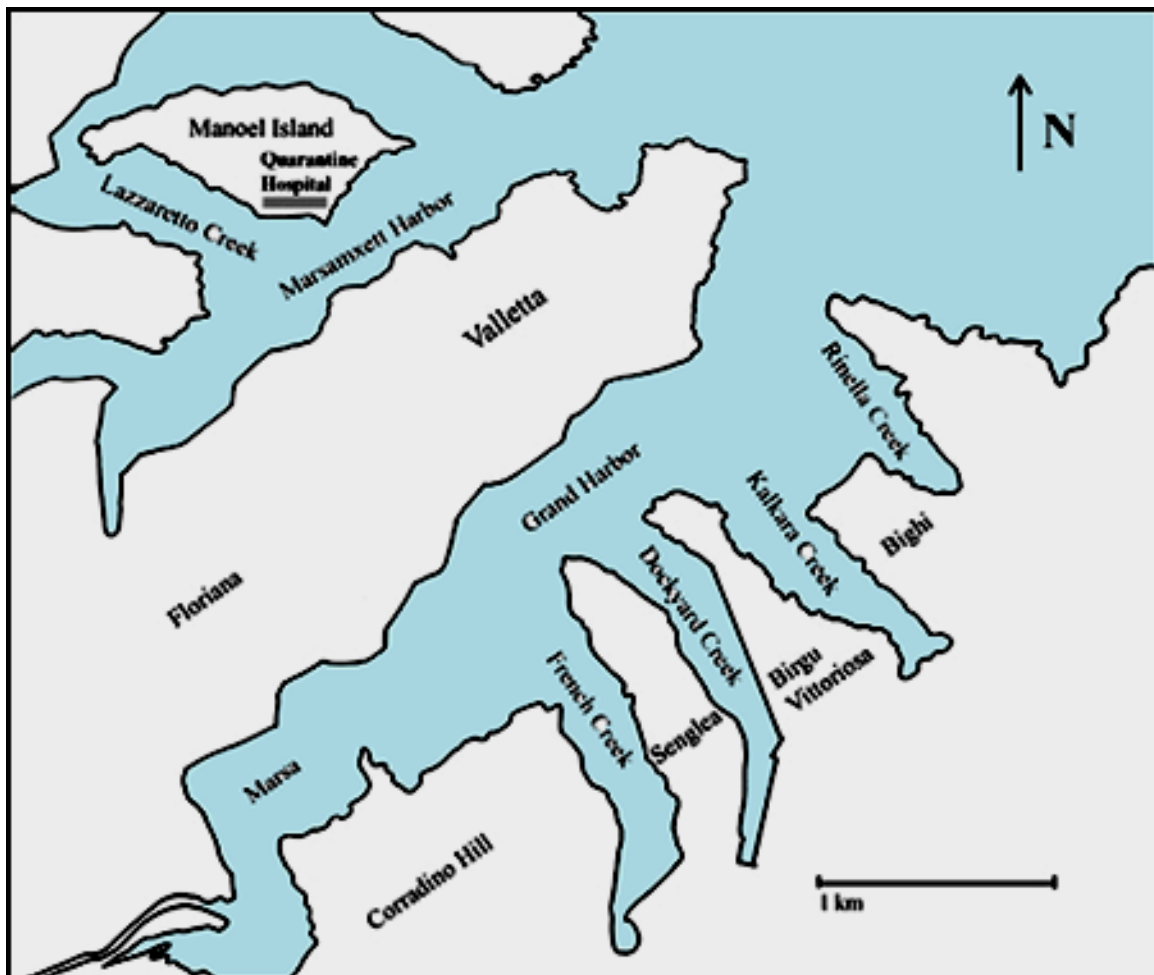


Fig. 2. Map of the harbor area around Valletta. (Map: author).

As mentioned above, Dockyard Creek was among the areas slated for marina construction. This part of the harbor was in use as early as the Roman period, and likely to contain archaeological material. In addition, archival records indicated that several ships sank in the creek in the sixteenth and seventeenth centuries. Unfortunately, a coarse sand bottom covered by a thick layer of silt characterizes the seafloor in this part of the harbor. Sonar systems are generally ineffective for finding materials buried beneath sand, and we had doubts about how well a magnetometer would function in this environment having a very high

concentration of modern debris, including chains and other metal objects. Consequently, on October 6, 1999, a few track lines were first executed to test the equipment.

The initial results seemed promising. In general, the targets within the survey area appeared to be flat, with no acoustic ‘shadow’, and most were crescent-shaped features with associated magnetic anomalies, interpreted as chains or pipe fragments that did not require further investigation. However, one target southeast of the ferry terminal off Vittoriosa was designated as a diving location based on the characteristics of its sonar image. It appeared to be an area consisting of a pile of uniform rocks with an associated magnetic anomaly. Piles of rounded rocks are characteristic of shipwrecks, since they are used as ballast on ships and portions of the hull are preserved under it. The extent of this site, nine meters long and four meters wide, bolstered the idea that it might be a shipwreck site (Fig. 3).



Fig. 3. Location of the ballast pile in the Dockyard Creek. The site was behind the tuna pans seen on photograph. (Photograph: author).

Diving investigations of this target were not successful due to very low visibility in the area. Constant boat traffic, low visibility and water pollution continued to be the most significant drawbacks for diving operations in the harbor area throughout the survey. In addition, diving operations yielded an important result: the rock pile/anomaly in the sonar image was not on the surface of the seafloor, and so not visible to divers; the side-scan sonar/magnetometer was detecting features underneath the layer of mud and silt. Although this compounds the difficulty of locating wrecks, it provides comfort in the knowledge that they may at least be well-preserved and available for inspection at a later date.

Additional investigations that included the removal of part of the ballast pile and probing led us to conclude that there was no wood preserved underneath the pile. Low visibility and boat traffic made further investigations impossible, and not being in an area scheduled for construction, this site was reserved for future investigation when more advanced equipment and funds become available. The site was added to the Museums Department's files to ensure its protection. Other sonar targets in Dockyard Creek turned out to be modern debris, metal and wood fragments that were too deteriorated for identification, and anchors of modern date.

The last area examined in Dockyard Creek was the site of the test trench excavated in 1984 during a survey by a French archaeological team. The objective was to ascertain the extent of silt accumulation in the creek. The French team had previously dredged silt and sand out of the creek, and recovered pottery dating to the sixteenth and seventeenth centuries. Our investigation determined that the site had been completely re-covered by silt in the fifteen years since the original survey. Only one fragment of possibly seventeenth century pottery, typologically similar to the finds of 1984, was recovered.

The second survey area was the main channel of Grand Harbor. We concentrated our efforts on covering the area between the land and central part of the harbor that was dredged in 1981. Although extensive boat traffic frequently interrupted the survey, two possible shipwreck sites were located between Senglea Point and Saint Angelo Point, and deemed worthy of investigation. Most other anomalies in the area surveyed were of known modern shipwrecks, which confirmed that the equipment functioned effectively, and that it could be used as a tool with which to compare new anomalies and to calibrate the equipment.

Another set of track-lines in the main channel of the Grand Harbor yielded an area of concentrated 'rock piles' around the location of a previously located target slated for revisiting. In general, these are mounds of rocks spaced about 100-50 meters from each other, some having clearly associated magnetic anomalies. The area is close to Senglea Point and, among the eleven targets detected, three were identified as worthy of diving investigation. Unfortunately, it was impossible to carry out any diving at this location due to heavy boat traffic.

The scope of the remote sensing survey in the third area included the entrance to Lazaretto Creek, the area to the southeast of Fort Manoel, and between the southernmost end of the Quarantine Hospital building and the easternmost tip of the Manoel island (Fig. 2). Clay pipes, musket balls, and various terra-cotta artifacts constituted the major groups of underwater finds in this area. The artifacts were consigned to the National Museum of Archaeology in Malta for further study. However, no shipwrecks were located in the area.

The 2000 Season

In April 2000 INA conducted an archaeological/geological hazard survey around Manoel island on behalf of the Malta Museums Department and TBA Periti Associates

Architectural Corporation. The area around Manoel island was surveyed in a series of closely-spaced parallel tracks, one set being perpendicular to the other utilizing the Malta Maritime Authority's (MMA) fourteen meter hydrographic survey vessel outfitted with a high-resolution sub-bottom profiler coupled to an advanced digital data collection system and a precision global positioning system accurate to within 50 centimeters. Two gigabytes of sub-bottom profile data were collected, our efforts being focused predominantly on areas adjacent to *Lazzaretto*, the site of the old Quarantine Hospital for ships entering Malta, and the proposed site of the breakwater construction. These areas are the most probable locations for potential negative impact on archaeological resources and the largest square area scheduled for seabed modification. Two shipwrecks within the survey areas were detected; however, the Museums Department was already aware of their location, disposition, and origin, and they were not considered particularly significant from an archaeological perspective. Several other sub-bottom anomalies were detected within the general survey area. We prepared detailed recommendations to the Museums Department to mitigate potential damage to these resources.

One area of concentrated sub-bottom anomalies detected during the survey and investigated by divers later in the summer was found to contain archaeological material ranging from Roman ceramic fragments to modern debris centered around a small mound on the seabed approximately five meters in diameter and extending in depth to approximately two meters beneath the seafloor. The area of high artifact density associated with this anomaly runs along a roughly north/south axis; however, no other anomalies indicative of similar deposits were detected on adjacent parallel transects. Modern nautical charts indicate the presence of a 'mound' directly along the anomaly 'path', most probably representing dredge spoil from modern harbor works that contained ancient material as well as modern debris. Previous diving surveys conducted in the region noted that the area had been extensively dredged to allow for the

berthing of deep-draft ships. However, no records of the dredging activity were located at the Malta Maritime Authorities files, so it is impossible to determine the source of the dredge spoil for further investigation. Based on the report we submitted to the Museums Department, no construction will be allowed in the immediate area of these remains, hopefully protecting those artifacts yet to be recovered.

In May of 2000 a joint INA-Maltese team carried out a preliminary survey of the anchorages in and around the Maltese Islands. The work was conducted using a Sea Scan PC side-scan sonar (Marine Sonic Technology, Ltd.), coupled with a GPS receiver.

The first phase of the summer was dedicated to extensive research among the documents conserved in the archives of the National Museum of Archaeology in Valletta. The museum possessed artifact files and annual reports dating to the early 1960s; the files offered information about the context and location of underwater materials now conserved in the museum storerooms. Re-evaluation of this data, utilizing geographical and chronological criteria, enabled the team to determine the areas with higher concentrations of archaeological material. The museum curators also allowed us to examine the forms submitted by sport divers and fishermen in order to indicate the location of artifacts they had seen. These files provided valuable information about potential areas of artifact concentration. They also were very informative since comparisons between earlier and more recent reports indicated the extent of looting and dredging damage to archaeological sites.

Our archival research also included the study of previously published material regarding the underwater finds. Moreover, many of our sources (i.e., a map indicating the location of ancient anchors and amphoras produced by an amateur diver in 1965) required considerable work to establish their reliability. A database of the information collected during the research

was created, and potential sites were plotted to determine the extent of the survey areas and to establish the sites of highest priority for immediate attention that summer.

We also allocated time for a survey of local navigation patterns and weather conditions. Based on the findings of this research that included a detailed analysis of factors such as coastline configuration, and prevailing winds and currents, we designed the survey program for summer 2000.

Another factor taken into consideration when assessing priorities for the survey areas was the growing season for poseidon grass or poseidonia (*Posidonia oceanica*). This type of sea grass has roots that extend nearly one meter into the sand bottom, the visible portion of the plant reaching up to two meters in height, and growing in thick banks to a depth of over 30 meters. It attains a heavy bloom in summer and leaves behind a thick carpet of dead rhizomes in winter. It is possible that this thick material covers shipwreck remains. Therefore, surveying in the winter and early spring, when the poseidonia is in its weakest state, would most likely yield better results, but hazardous navigation conditions would prevent access to the areas of greatest interest.

Every survey area required the use of a different approach, and the survey techniques were generally dictated by the nature and location of the site. However, other factors such as the availability of the equipment or weather conditions also played a role in the choice of surveying techniques utilized. The survey techniques employed during the summer of 2000 can be grouped as follows:

- Diving investigations of previously known and reported sites,
- Side-scan survey of the coastline,
- Diving examination of the targets detected by the side scan sonar, and

- Diving surveys on hazardous points.

The first survey area of the 2000 season was Marsascala Bay, one of the few safe anchorages in northeast Malta (Fig. 4). The objective of our investigations was to perform a visual inspection of the area where the National Museum of Archaeology in Valletta and DRASSM conducted a rescue excavation in 1993. The area was included in the survey program at the explicit request of the museum curators, who felt that detailed mapping of the site might help better determine its nature. If the artifact scatter presented other chronological concentrations beyond the fourth and sixth centuries, it might indicate a site with multiple shipwrecks. However, a lengthy diver search established that any material still on the site must be buried beneath the poseidonia. In addition, the site is vulnerable to damage from storms and to plundering by divers who have easy access to it. No further surveying of this site was carried out for the following reasons: (1) previous work in this area produced sufficient material for the dating of the site, (2) the site is stable and is preserved under the poseidonia, and (3) the Bay is a popular swimming and diving area, and scientific dives by our team seemed to promote interest that might lead to disturbance of the site upon our departure.

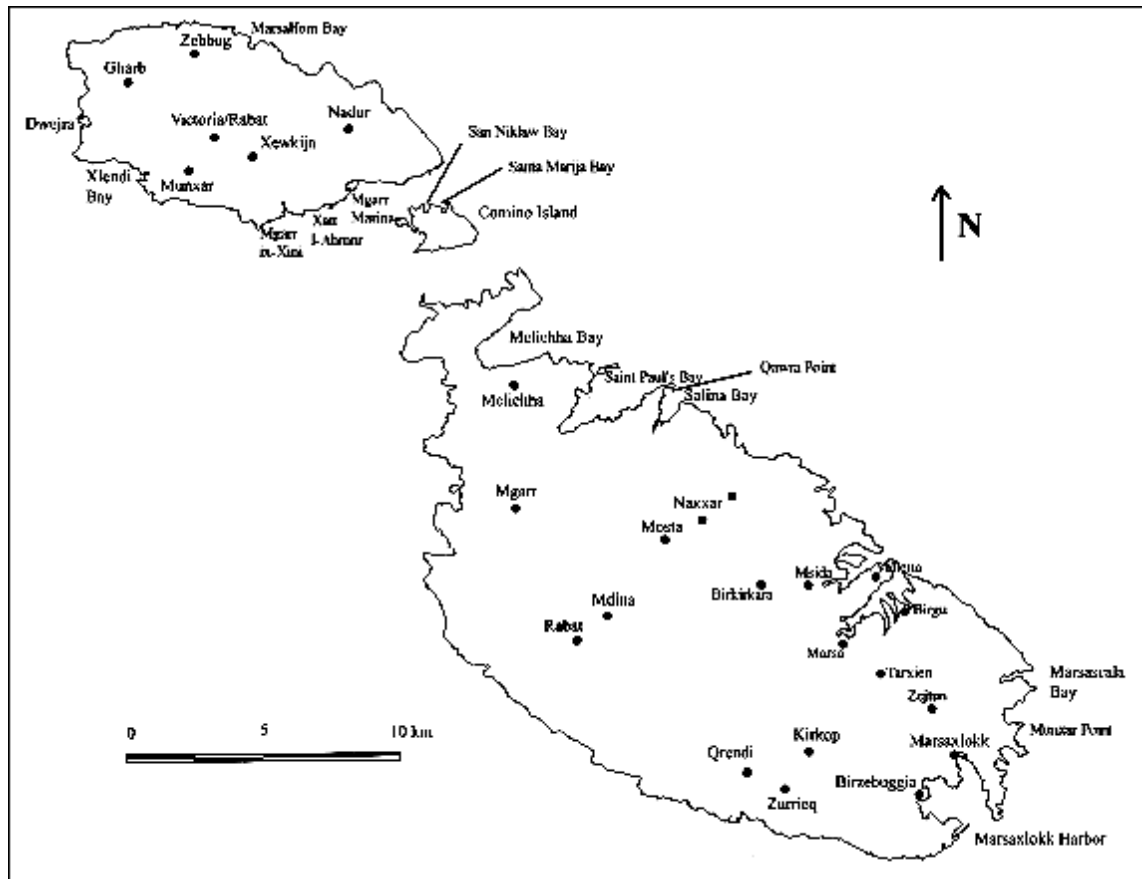


Fig. 4. Map of Maltese Archipelago showing the major modern settlements. (Map: author).

Our second survey area was on the eastern shore of Salina Bay (Fig. 4). The site is characterized by a significant pile of stones not of local origin. The majority of the agglomeration is comprised of tufa, with much smaller quantities of what appear to be slate and black marble (Fig. 5). A photomosaic coverage and measurements using a baseline and offsets generated a site map. Extensive diver inspection produced two amphora fragments buried deep within the pile of rocks. The base fragment includes the toe, while the body fragment is ridged. Possible parallels pointed to a North African type common in the fourth century A.D. The sherds appear to be consistent with, and non-intrusive to, the mound of stones considered to be

the ballast of a Late Roman shipwreck. A petrological analysis of rock samples from the site is required to determine the type of ballast and, if possible, the provenance of this ship. Unfortunately, there is little probability that wooden elements of the hull are preserved on the site. In two different locations divers reached bedrock by hand fanning in and around the stones. Therefore, a full excavation of the site would be unlikely to yield results commensurate with the costs.



Fig. 5. Photograph showing the ballast pile in Salina Bay. All artifacts associated with the site were collected from the layer below the stones. (Photograph: author).

The third survey area of the 2000 season was near a reef close to Munxar Point (Fig. 4). In 1964, an amateur diver reported a wreck of “Spanish Romano” amphoras located in this area and the report was also supported by later sightings of possible amphora sherds by other amateur divers. Side scan track-lines were run parallel to the reef, and an area varying in depth from

seven to fifty-one meters was covered. However, the survey produced no targets or anomalies requiring visual diver inspection. In addition, it was clear that diving investigations would be safer and more productive if carried out in another season, since thick *poseidonia* obstructs the bottom, the presence of fish farms that attract big seasonal fish such as shark and tuna create safety concerns, and visibility is low due to pollution caused by these fish farms.

A number of artifacts reportedly brought up off Qawra Point were donated to the National Museum of Archaeology in 1964 and 1969. Most of these artifacts are Roman anchor stocks and collars, including the largest Roman anchor stock ever found (about 4 meters long). In addition, debris consisting of Roman amphoras of the third century B.C. was reported in 1965 by a local amateur diver. Moreover, Qawra Point was selected as one of our survey areas due to recent reports of eroded sherds washing up on shore after storms. The side-scan sonar track-lines were run from Tal-Ghazzenin Reef to Qawra Point, but no archaeological targets were identified in this area.

Saint Paul's Bay has long been of interest for its legendary association with the biblical account of Saint Paul's shipwreck in Malta (Fig. 4). However, various searches by previous expeditions showed the virtual absence of archaeological material that might be dated to the period. On the other hand, artifacts such as a pilgrim's flask similar to Byzantine types from the sixth and seventh centuries, one complete Dressel 20 amphora, a large grapnel type iron anchor of the eighteenth century, and other scatters of Phoenician ceramics of sixth to second century B.C. date were reported.¹¹ It was also reported that post-medieval ceramic materials, generally characterized as 'Berber ware', wash into the bay after storms. The INA team ran several track-lines around Saint Paul's islands and across a reef at the head of the islands. Data was also gathered in the small bay to the west of the islands and the next peninsula to the west of Saint Paul's Bay, Blata l-Bajda. Several anomalies were detected and noted for future visual

inspection by divers. The reef immediately to the north of the islands is one of Malta's premier diving locations, and the probability of finding undisturbed artifacts in this region is very low.

Sport divers have extensively plundered the area around Comino Island. Additionally, the small bays on northern Malta and southern Gozo facing Comino (Santa Marija and San Niklaw Bays) are also known to have included archaeological material reported as looted in the past. One wreck, pillaged in the 1970s, is said to have yielded an alabaster vase of unknown origin.¹² Additionally, there are a few artifacts donated to the museum from this area, including a grapnel-type anchor with four flukes recovered by the Royal Navy from the Comino Channel in 1965, two lead anchor stocks raised in 1994, and a Greco-Italic amphora found in the region in 1999. The archaeological evidence from land contexts, dating to the Phoenician and Punic periods of occupation, suggests extensive seafaring activities between the fifth and the third centuries B.C. The area was selected as a high priority for archaeological survey based on the above-mentioned information and the report of a possible Punic wreck site that contained amphoras from the late fourth century B.C. However, the sonar data from Santa Marija and San Niklaw Bays and from the channel between Comino and Gozo produced only a few targets of small scale not likely to be shipwreck sites. Visual inspections in the two bays by divers did not locate any significant cultural material due to the thick bloom of poseidonia.

Museum divers reported sightings of large amphoras amidst boulders at the base of a cliff side approximately 30 meters to the south of the Xatt l-Ahmar Point. The amphoras were visible after winter storms in the area. Several sonar tracklines were run parallel to the shore from Xatt l-Ahmar Point southward. Visual diver inspection located the aforementioned boulders at a depth of over 40 meters, but divers saw no amphoras exposed above the sand.

The entrance to Xlendi Bay is made treacherous by the presence of a pair of submerged reefs, and the area is known to have produced whole amphoras that span a significant period in antiquity (Fig. 6). Amphoras recovered from the bay in the past 40 years include examples of all of the following types: Punic, Aegean Greek, Greco-Italic and Roman.¹³ Recently, a cylindrical fourth-century African amphora was recovered by fisherman near the northern reef. Because no harbor works have yet been located in the surrounding village and countryside, ancient sailors probably used Xlendi Bay only as a safe anchorage during storms. The INA team extensively surveyed this promising area, running one trackline into the bay itself and several tracklines parallel to the shoreline across the entrance to the bay. The lines covered the steep drop-off of the shore to a depth of approximately 80 meters. A group of anomalies was noted for further examination by divers or by a remotely operated vehicle (ROV).



Fig. 6. Map showing the locations of the ROV survey areas of the 2001 season in Gozo. The area to the west represents the entrance to the Xlendi Bay and the one to the east is the area near the Mgarr ix-Xini inlet. These areas were first surveyed in 2000 using a side-scan sonar. [Map: based on the Admiralty Map 2537 titled Ghawdex (Gozo), Kemmuna (Comino) and the Northern part of Malta (1984)].

The 2001 Season

Summer 2001 was the third season of the systematic survey of the Maltese coastline by INA. Based on the findings of the previous seasons and the research that has been carried out in the first two years of the survey project, we decided to concentrate our efforts in two areas. The first phase of the survey was the systematic collection of the surface debris and the excavation of four test trenches in the area adjacent to the Quarantine Hospital in Marsamxett Harbor. The second phase of the survey included a remote sensing and ROV survey of the area near Xlendi Bay and the area between Xatt l'Ahmar and Mgarr ix-Xini inlets, concentrating on the 100-meter-depth profile where the previous season's side scan sonar targets were located. In addition, we have dived with a hand-held magnetometer into an area near Zonkor Point upon the Museums Department's request. Two iron swivel guns were found in this particular spot; we searched the area for more artifacts of this type and to determine whether or not this represented a shipwreck site. After two dives into the area, we determined that there were no other iron or ceramic objects buried in the sand, making it unlikely that this represented a shipwreck site. Our team also dived near the watchtower at the entrance of the Mgarr ix-Xini inlet in Gozo to search for the iron guns that fell to the sea from the watchtower according to the archival documents. We did not find any guns. It is possible that the archival documents that indicated the guns were mistaken or that they were recovered at a later date.

The Excavation on the Waterfront of the Quarantine Hospital

The two large and well-protected harbors of Malta, Marsamxett and Grand Harbors, are located to the north and to the south of Valletta, respectively. Manoel Island is at the middle of Marsamxett Harbor and is today connected to land by a small bridge. Conducting a survey

around Manoel Island was important for several reasons. First, it is impossible to have an understanding of the maritime history of Malta without knowing the history of land use around Marsamxett Harbor, the second most important harbor in the archipelago. Second, Manoel island was the site of the Ottoman camp during the ‘Great Siege of Malta’, and it is possible that archaeological objects from this period are preserved in the harbor silt. Third, Marsamxett is mentioned in medieval texts during times when the Catholic Church had banned trade with the Muslims; Christian and Muslim ‘pirates’ exchanged their goods on Manoel island away from the prying eyes of the tax collectors in Birgu, the medieval harbor of Malta. Fourth, and perhaps the most important reason for our survey in Marsamxett, is that Manoel island was the quarantine center of Europe for nearly two centuries.

Quarantine control became institutionalized in Malta in the mid-seventeenth century. The goal was to segregate incoming passengers and imports from countries where occurrence of the plague was considered epidemic or from countries in the Western Mediterranean that were known to be infected with plague (see Chapter XI, section about quarantine shipping, for detailed discussion). Passengers and goods coming from these lands had to be cleared by quarantine authorities before being granted release to circulate in Malta or to proceed on to other destinations in Europe. The quarantine period lasted 40 days, during which time the cargo was unloaded within the *Lazzaretto* where it was subjected to ‘fumigation’.

Manoel Island was utilized as a quarantine center, *Lazzaretto*, since 1593. The first building of the permanent *Lazzaretto* was erected in 1643 by the Grandmaster of the Order of Saint John, Lascaris. It was enlarged in later periods, but this first structure was used as a dive platform for the INA team during the diving survey.

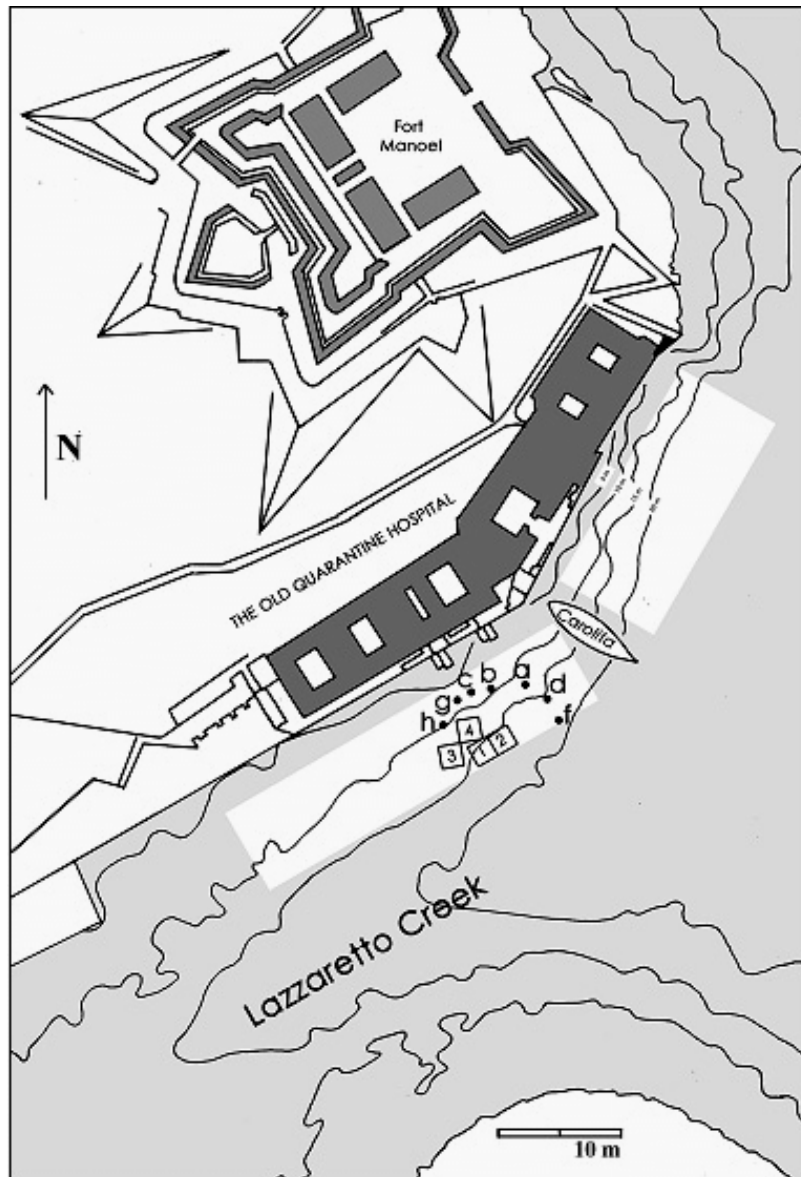


Fig. 7. Map showing the location of the excavation squares (labeled 1-4) at the Quarantine Hospital (locations of the excavated sand pockets - labeled a-h). (Map: author).

Our investigations in the area began in April 2000, when a team from INA and the Malta Maritime Authority conducted an archaeological and geological hazard survey around Manoel island using a high-resolution sub-bottom profiler. During diver inspections of sub-bottom profiler targets, archaeological material ranging from Roman to the modern era was recovered.

The abundance of artifacts near the Quarantine Hospital was an impetus for further study in the area, and an extended survey involving systematic collection of surface material and excavation of a number of trenches was planned for the summer of 2001 (Fig. 7).

The underwater slope in front of the Quarantine Hospital is littered with furniture discarded from the hospital and large boulders that tumbled into the sea when the building was damaged by bombing during WWII. In addition to beds and boulders, the charm of the site is augmented by *Carolita*, a modern iron-hulled wreck that attracts fish and sport divers to the area. *Carolita* looks almost haunted in the murky waters of the harbor, where visibility is never greater than three meters. The diving survey near the Quarantine Hospital proceeded under these circumstances and in two phases: (1) a systematic surface collection of archaeological material, and (2) the excavation of test trenches in the most promising areas. The team consisted of eight divers from INA, the National Museum of Archaeology, the University of Malta, and Bristol University.

The first dives focused on acclimating team members to diving in zero visibility and on the collection of archaeologically-diagnostic surface material. After each dive a short meeting was held to familiarize team members with the archaeological material recovered and to hone their skill on discerning artifacts. The surface material was mostly whiteware used by the Royal Navy in the nineteenth and twentieth centuries, broken artifacts dating to the sixteenth and seventeenth centuries, and a few late Roman and Byzantine ceramic sherds.

Once the surface survey data was analyzed, the areas for excavation squares were selected. The squares were made of PVC pipes and measured two meters on each side. Each diver was assigned to one quarter of a square. Artifacts were sketched and photographed prior to their lifting. Divers were also responsible for labeling and on-site logging of artifacts from their

sections. A water dredge was set up to increase the speed of silt removal and to increase visibility by sucking away suspended sediments. In addition to the squares, a number of up-slope sand pockets were excavated, because they formed natural traps for material spilling down the slope and had better stratification of the preserved artifacts. Once the loose silt was removed, the grayish and more compact level of silt that contained earlier artifacts was reached immediately, especially in the sand pockets. However, the layer approximately ½ meter below the gray silt preserved traces of poseidonia roots that grows only on a sandy bottom and dates approximately to the seventeenth century. Archaeological material from this layer yielded more consistent dates. The location of the grid squares and the excavated sand pockets were measured and plotted on a large-scale map and assigned real world coordinates.

Ceramics from the excavation were cleaned, desalinated, reconstructed, photographed and drawn once the excavation was over. All 434 logged artifacts were entered into a database that allowed for comparison of the archaeological material in terms of their number, date and origin (see Appendix D). Although the ceramics are still being studied, preliminary observations indicate that eleventh and twelfth century Islamic ceramics (possibly of North African origin) outnumber the seventeenth to early nineteenth century polychrome Majolica sherds of the ‘Knights’ period when the Quarantine Hospital was heavily in use. This points to an extensive use of the Marsamxett Harbor during the medieval period.

Shipwrecks off Xlendi

The deep-water work scheduled for the 2001 season concentrated around an area of seabed near the entrance to Xlendi Bay, an inlet on the southwest coast of the island of Gozo. Prior to the construction of an artificial breakwater at Mgarr, Xlendi was possibly one of the most widely-used anchorages of Gozo. Even so, the inlet is not an ideal anchorage, because

there are two shallow reefs at its entrance. In addition, the entrance to Xlendi is characterized by turbulent waters, since it is not protected from the prevalent winds as demonstrated by the existence of wrecks in shallow parts of Xlendi. Two shipwrecks of Roman period were partially excavated by divers of the British Navy in the early 1960s, and the rest of the sites were looted in the following years. Today, no trace of these two shipwrecks is to be found. Several currents of variable intensity, in addition to seasonal variations, make the entrance to this small anchorage even more difficult. The topography of the island of Gozo makes the interior of the Xlendi Inlet a dangerous anchorage, as the winds funneling through the deep valleys of Gozo create turbulence on stormy days, putting the boats at anchor between two opposing winds. Our side scan surveys in the area from the previous season demonstrated that there were scattered artifacts in the shallow parts (shallower than 80 meters) of the entrance. Interviews with fishermen and reports made available for our research by the National Museum of Archaeology suggested high archaeological potential along this coastline and to select it as one of our main survey areas.



Fig. 8. The survey team launching the ROV. (Photograph: author)

The initial survey relied on the use of a scanning sonar that was part of the ROV equipment; ROV cameras immediately inspected anomalies detected by the sonar. The survey was carried out using a small remotely operated vehicle (ROV) (Fig. 8). These ROVs (which typically weigh between 200 and 500 kg) are perhaps the most ideal vehicles for archaeological purposes. They are fairly inexpensive, but have enough flexibility, power, and size to complete advanced documentation tasks and even those requiring sampling in deeper water. In addition to the scanning sonar and video cameras used to locate and document artifacts, the ROV was equipped with an underwater positioning system for fixing its location and the objects it locates relative to the survey vessel. The equipment also included a laser-based underwater measurement system, for measuring artifact positions and dimensions.

The major find made by the ROV and its associated technology in 2001 was an amphora scatter off the entrance to Xlendi Bay (Fig. 9). The scatter consists of thousands of amphoras, representing at least seven different types, spread over an area of about four-by-one kilometers. The depth and the nature of the site (an anomaly located at the middle of flat, sandy bottom at a depth of 100-130 meters) compel us to identify it as a 'shipwreck' site. However, it is unclear whether the deposit represents a single large shipwreck site, or more likely, a multiple-wreck site.



Fig. 9. The shipwreck site off Xlendi. (Photograph: author).

We were able to identify seven different amphora types represented on the Xlendi site (see Appendix A), but it is very difficult to date the entire site based on the examination of a single archaeological sample we were able to bring to the surface with the equipment available to us during the preliminary survey season. The small size of the ROV made it impossible to raise complete amphoras that are full of sediment and only allowed the collection of small and broken pieces. Detailed information regarding the dating of the amphora types is provided in the Appendix A. The archaeological sample was identified as a Punic amphora of the third century B.C. Other types of amphora from the site dated to different periods. Based on preliminary visual examinations, their dates range from the fourth century B.C. to the third century A.D. The amphora types are very common Mediterranean varieties originating from various centers of

the Western Mediterranean. Further study of the Xlendi shipwreck is crucial to understand the role played by Malta in interregional trade through seven centuries. Detailed analysis of these artifacts is planned upon the issuance of an excavation permit from the Maltese authorities.

An additional area near the Inlet of Mgarr ix-Xini on Gozo was surveyed using the ROV. The inlet has similar characteristics to that of Xlendi. Located on the same side of Gozo, and one of only three semi-sheltered anchorages on the island, it held similar potential in our minds as Xlendi (Fig. 4). In both Xlendi and Mgarr ix-Xini, the entrance of the inlets looks promising to ships seeking shelter in bad weather. However, the wind funnels through the valley landward of the mouth, and creates contrary waves to those of the open sea. In such instances, commonsense compelled ships to escape from the trap, but if the storm reached a certain strength it was impossible for the ship to escape this situation. Our hypothesis was disproved by the complete absence of exposed archaeological material near the entrance to Mgarr ix-Xini. Therefore, Xlendi was a harbor or anchorage known to sailors, but the multi-shipwreck site outside the inlet indicates that this was unfortunately a poor harbor, and sailing was difficult and risky around Gozo.

Summary

At the end of our third season of surveying the coastline of the Maltese Islands, we reached certain conclusions. It was clear that there were no obvious shipwreck sites in the surveyed areas with the exception of Xlendi. The most likely area to contain shipwrecks, Grand Harbor, was silted, heavily dredged, and polluted. Heavy boat and ship traffic in the harbor made it a dangerous diving location. It was also very difficult to use any towed vehicle for remote sensing surveys due to obstructions such as buoys, lines, garbage, and other items cast from ships.

It was also interesting to note that the only shipwreck site we found dated to the Roman period, which was likely a time when navigation around Malta was not as frequent as it was during later periods, such as the era when the Order of Saint John was based on the island. Thus, it was clear that the shipwreck evidence did not concur with the historical record, but it did not provide sufficient evidence to suggest a revised approach to Maltese history.

At the end of our third season, it became necessary to carry out extensive research and place our findings in a historical perspective to determine how much our work contributed to filling the gaps in Maltese history and archaeology. This in-depth analysis of the maritime history of Malta also became absolutely necessary to determine future survey areas and also to have a better idea about what archeological evidence survives and where we could expect to find it.

Surprisingly, it was not possible to find a scholarly source that treated the full breadth of Maltese maritime history, which meant that this information had to be compiled first. This dissertation is the outcome of this research project, presented as a chronological arrangement of the historical, archaeological, and ethnographic data regarding the maritime past of Malta.

CHAPTER III

PREHISTORY OF MALTA

First evidence of seafaring activity in the Mediterranean dates to about 10,000 B.C., based on the archaeological discoveries of obsidian that originates from the island of Melos at Franchti Cave on mainland Greece. This crossing was not a very difficult one, but the appearance of deep-sea fish bones in the same site about 8000-7000 B.C. and evidence of Neolithic settlers of Anatolian or Levantine origin in Cyprus in the second half of the seventh millennium B.C. are solid proof that human beings developed the ability to navigate the Mediterranean.¹ Crete was colonized in the seventh millennium and the islands of the Aegean and the Ionian seas received their first Neolithic occupants over the next two millennia.² In the western Mediterranean basin, the first settlers of Corsica appear to have reached the island in the ninth millennium, and those of Sardinia arrived in the late eighth or early seventh millennia.³

The first settlers arrived on the Maltese Islands around 5200 B.C. This relatively late date of its settlement is possibly due to the small size and low relief of the islands that would have necessitated blind crossings of a distance of about 100 kilometers, which separates the Maltese Islands from Sicily.⁴ Natural forest fires and other indications might have led the men on Sicily to determine the existence of an island in this location, but performing the actual crossing still required the development of certain skills. Moreover, the fact that Sicily is quite a fertile land itself possibly delayed the necessity to seek alternative farmland.

The first Neolithic culture of Malta displays similarities with those of Monte Kronio in Sicily. The local culture appears to have had contacts with the eastern Sicilian cultures of the Middle Neolithic previously grouped under the Stentinello culture.⁵ The earliest people on the

islands initially occupied rock shelters and open dwellings and developed what is known as the Ghar Dalam culture. They grew barley, wheat and lentils, practiced fishing, and supplemented their food with hunting. To the early Neolithic farmer on Malta the sea served more as an isolating factor, since no valuable raw materials were available on the islands that could attract traders.⁶ The absence of resources also provided these settlers with some degree of security since they were not harassed by outsiders. Unlike the villages in Sicily, those in Malta are not fortified during this period.⁷ The Ghar Dalam culture evolved into the Grey Skorba culture some time between 4500-4400 B.C., and into the Red Skorba culture between 4400-4100 B.C. Monochrome red pottery is characteristic of the Red Skorba Period, which is largely influenced by the Diana culture of Sicily.⁸

During the fourth millennium new waves of Sicilian farmer migrants, differentiated from their predecessors by their new ceramic repertoire, reached the islands. The Zebbug and Mgarr phases span the first eight hundred years of what is known as the Temple Period (4100-2500 B.C.), but these phases have not yielded any temple remains. The most important contribution of these two early phases lies in the fact that advances had been made in agriculture, and the Neolithic community managed to provide a surplus of food that was essential to sustain a healthy community. This allowed a group of people to take leadership in ritual and community affairs, developing a more complex hierarchy, and thus providing the seeds for social change that shaped later prehistory. The surrounding sea allowed commercial and cultural contact with Sicily, but also isolated the Maltese Islands by allowing their inhabitants to evolve on internal inspirations to create the Megalithic monuments characteristic of the Temple Period (Fig. 10).⁹ Each of these temples, with its particular plan, belongs to a group of structures that claim to be one of the earliest achievements of mankind. Colin Renfrew notes that these structures are the earliest free-standing monuments of stone in the world and that the "earliest architecturally conceived

exterior in the world" is probably the facade of the Ggantija Temples on the island of Gozo.¹⁰ On mainland Malta the temples at Hagar Qim possess the earliest use of dressed stone in human prehistory, while the colossal statue of a fertility goddess in the western temple at Tarxien was probably unique for its size at the time.¹¹



Fig. 10. Interior apse of the Mnajdra Temple. (Photograph: author).

During this period of Maltese prehistory cultural development was characterized by the isolation of the island, both in terms of being closed to outside influences, and being closed to influencing the neighboring regions. While Sicily was inhabited by a population that possessed metallurgical technology, the population of Malta appears to have been unaffected by this new technology.¹² A more striking aspect of the insularity and isolation of this splendid culture is the fact that external contacts were never interrupted but a diffusion of cultural influences did not take place.¹³ What stands out about this period is that this culture had no influence on the

development of other cultures, and there is no indication that the temples were visited by outsiders.¹⁴

Very little is known about the events of this period and the reasons why this culture disappeared. The reasons are possibly related to the considerable quantities of timber used in temple construction which led to deforestation and instability of climate, soil erosion, drought, and eventual crop failure. According to Trump, these circumstances could easily lead to famine, war and disease, and the survivors would be forced to leave or die.¹⁵ What is clear is that there is no cultural continuity of traits in the succeeding cultural record, and it seems likely that the population of the Maltese Temple culture disappeared or abandoned the islands abruptly.¹⁶

After the collapse of the Temple culture the islands were re-inhabited by immigrants, known as the Tarxien Cemetery people, characterized by a much more advanced tool and weapon technology - they practiced bronze metallurgy - but a notably inferior artistic and artisan culture.¹⁷ Clearly, the Bronze Age in Malta was less rich culturally and economically than the Temple culture. The Tarxien Cemetery culture is mostly known for its funerary remains (dolmens), and it is likely that its people came from Sicily or South Italy, as suggested by close affinities with the pottery production of Capo Graziano in Lipari and with other pottery from Sicilian sites like Serrafellicchio, Manfria-Zichilino, and Barriera.¹⁸

Contacts with, and possibly migration from, western Sicily resulted in establishment of the second local Bronze Age culture of Malta, named after the type site at Borg in-Nadur (1500-700 B.C.).¹⁹ These people, after a transient coexistence with the Tarxien Cemetery people, are characterized by settlement patterns that show preoccupation with defense and security (i.e., *il-Wardija ta' San Gorg*). There are traditions that suggest connections with Mycenaean Greece during the Borg in-Nadur period. These are generally based on the identification of Malta as

Ogygia, the island of Calypso, visited by Odysseus on his return from Troy and the reference in Lycophron to a settlement in Malta of a group of Greek warriors on their way back home from the Trojan war.²⁰ Unfortunately, there is very little archaeological evidence to support the theory of established relations with Mainland Greece.²¹ Another chronologically overlapping culture with Borg in-Nadur, known as Bahrija culture, occupied areas in western Malta. Bahrija pottery, dated between 900 and 700 BC, has parallels in Calabrian and Campanian vessels.²²

Overall, the data indicate that the Maltese Islands became increasingly interconnected with neighboring mainland cultures in the second millennium.²³ The Bronze Age settlements of the Maltese Islands are on relatively elevated locations, and their fortifications seem to reflect a marked change in the international climate of the central Mediterranean.²⁴ Given the total absence of mineral resources in Malta, it is hard to guess why traders could have been at all interested in these islands that were removed from their major routes along the coast of Sicily and southern Italy.²⁵ It is also difficult to understand what Bronze Age Malta offered in exchange for imported copper. Based on the remains of colored textile found at Tarxien and other archaeological evidence related to the production of purple dye, Sagona suggests that Malta was a dye or a textile producer by 1500 B.C.²⁶ The period corresponds to an increase of exotic artifacts in Malta and it could be argued that these commodities were traded for Maltese cloth.²⁷ There are various interpretations of the archaeological material from Malta between this last culture of the Bronze Age and the arrival of the Phoenicians. Gras believes that Malta became a “cul-de-sac” at the fringes of the navigation routes, and increasingly dependent on Sicily. Gras suggests that all the artifacts (including all Greek and early Phoenician pottery) of foreign origin found in Malta came through Sicily.²⁸

The twelfth century in the eastern Mediterranean is marked by a series of political upheavals that resulted in the collapse of the Hittite Empires, the end of the Mycenaean

Civilization, the beginning of the Dark Age in Greece, the destruction of important and thriving cities like Ugarit, and the emergence of new political and ethnic entities on the Syro-Palestinian coast (the Phoenicians in the North and the Philistines in the South). These rapid changes in the eastern Mediterranean are attributed to the activities of the mysterious Sea Peoples, invaders from the north.²⁹ It seems that these events were felt in the western Mediterranean indirectly by the collapse of the economic system and trade network. There is no doubt that the connections between the east and the west of the Mediterranean were weakened during the period between the collapse of the Bronze Age trading systems and those initiated by western colonizers from Ionia, Greece, and Phoenicia.

CHAPTER IV

PHOENICIAN AND PUNIC PERIODS

Arrival of the Phoenicians in Malta

The Phoenicians began sailing to the western Mediterranean sometime between the tenth and the eighth centuries B.C., exploring and exploiting the geological and natural resources of the region. It is known that these pioneers established colonies in Sicily, Sardinia, and Spain around the eighth century B.C.¹ Development of Phoenician shipping routes and the establishment of a trade network, shared with Greek merchants, quickly led to a significant improvement in commercial ties between the settlements in the east and the west of the Mediterranean.²

The date of Phoenician colonization of the Maltese Islands cannot be determined with precision because of the lack of stratigraphy in the island's thin soils and the continuous occupation of archaeological sites.³ Ceramics found in a tomb at Mtarfa represent the earliest datable objects of Greek and Phoenician origin in Malta and date to the first half of the seventh century B.C.⁴ Another tomb at Ghajn Qajjet (Rabat) includes ceramics that date to the second half of the seventh century B.C.⁵ However, according to Moscati, the colonization of Malta dates to the mid-late eighth century B.C., based on archaeological evidence from Tas-Silg (Fig. 11).⁶ Sagona suggests that an initial period of frequent Phoenician visits may have led to the foundation of some sporadic settlements, but full-fledged Phoenician colonization took place between the mid-eighth and early seventh centuries, characterized by an increase in imported pottery from the Levant and the Aegean. This is contemporary with the tomb at Ghajn Qajjet.⁷

On the other hand, Frendo prefers to classify this early period of Phoenician presence that extends from the late eighth to the period of the first inscriptions of the sixth century as the ‘prehistoric’ phases of Phoenician Malta.⁸

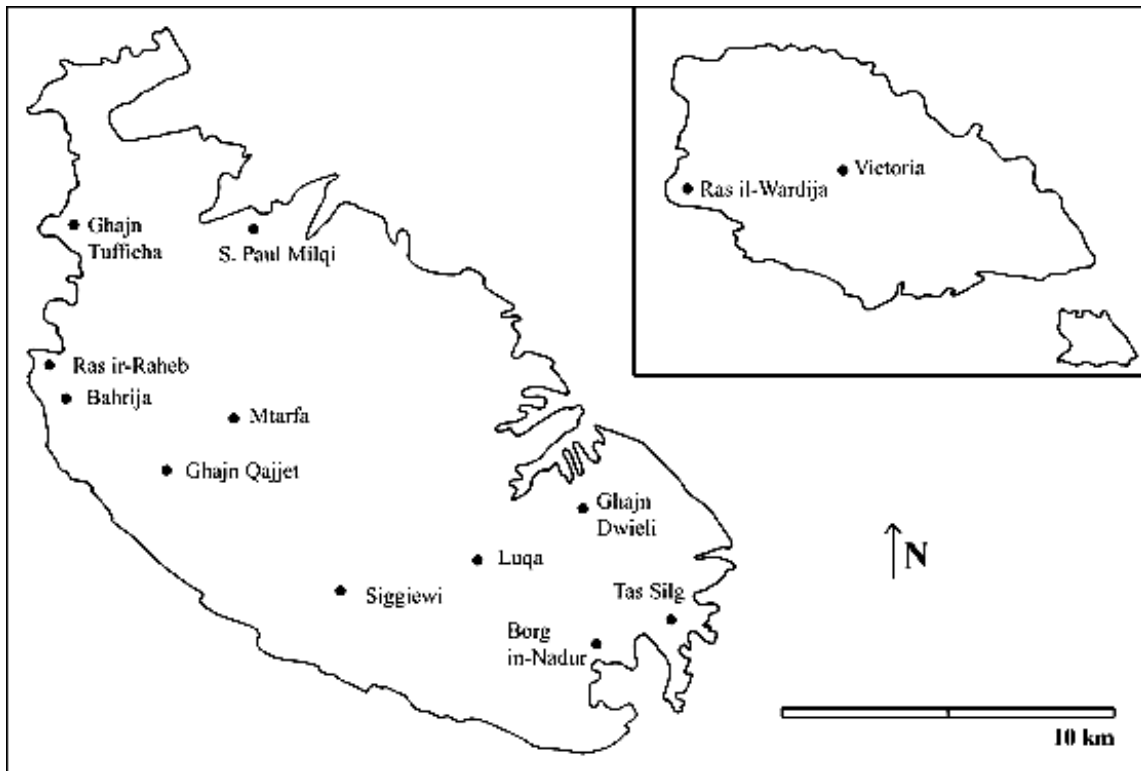


Fig. 11. Phoenician settlements of Malta and Gozo (after Ciasca, “Malta,” p. 207).

We know very little about the condition of the Maltese Islands when they received their first Phoenician settlers. One approach suggests that the Bronze Age culture in Malta was already declining at the beginning of the first millennium, and that the archaeological evidence suggests a decrease in population. Accordingly, the first Phoenicians to arrive in the eighth and seventh centuries found a community living in conditions similar to a squatter occupation around Tas-Silg.⁹ This view also suggests that the Phoenician colonists implanted their own material culture with little to no input from the local elements.¹⁰ On the other hand, certain

interpretations of archaeological evidence points to the possibility that the local Bronze Age people of Malta and the Phoenicians co-habited the island prior to the beginning of the full-scale Phoenician colonization.¹¹ Archaeological evidence from the Bronze Age settlements with superimposed Phoenician habitation levels (such as Mdina) yield early Phoenician pottery clusters in proximity to or mixed with the local Bronze Age wares.¹² It is certain that the colonization of Malta was a slow and gradual process, making it difficult to recognize in the archaeological record. Unfortunately, the picture is too incomplete to help us understand the nature of the relationship between the local population and the Phoenician settlers.¹³

The Phoenician colonization of Malta has many peculiar and puzzling characteristics. The choice of new and autonomous centers with well-defined features, like promontories and small islands in front of the coast, characterizes the Phoenician presence in the Mediterranean area.¹⁴ The fact that the Phoenician settlements of Malta replaced the native Bronze Age towns is very atypical, which, according to Moscati, is an adaptation to special circumstances characterized by the geography of the Maltese Islands, rather than by a contradiction to usual criteria.¹⁵ In other words, existing Bronze Age towns were settled because they occupied the only accessible parts of the coastline, while the high and steep coastline of the archipelago eliminated the possibility of founding typical Phoenician settlements. Therefore, it was a necessity, rather than a matter of pure choice, which conditioned Phoenician settlement in Malta.

Phoenician colonization and the development of a related trade route dotted by commercially-active centers led to a rise in wealth and number of the inhabitants of Malta. Diversification of this population led to development of the humble Bronze Age settlements into urban centers on the island such as those at Mdina-Rabat and Paola-Marsa.¹⁶ The highland urban center of Gozo was at Victoria/Rabat, but almost nothing is known about the coastal settlements.¹⁷ In the fourth century B.C., Pseudo Skylax mentioned that the islands were

inhabited by the Carthaginians, Melite was a city with a harbor, and Gaulos was (*only*) a city.¹⁸ It is also possible that the Island of Malta developed a secondary settlement close to the existing Neolithic structure at Tas-Silg, and around the bay of Marsaxlokk, which may have functioned as the main harbor and commercial center of Malta during the Phoenician period.¹⁹ According to Gonzales, the function of the Phoenician temple that replaced the existing structure at Tas-Silg was to legitimize the occupation of the island, indicating that it now was under the protection of the new deity Astarte. Sanctuaries dedicated to Astarte are generally related to the protection of navigation, Phoenician ships, commercial enterprises, and the ports that are essential parts of this system.²⁰

The Rationale and Significance of the Phoenician Colonization of Malta

The objective of initial Phoenician colonization of Malta cannot be explained by the attractiveness of its natural resources. Based on information presented by the Roman historian Diodorus Siculus,²¹ many scholars believe that the most ‘obvious’ attraction of the archipelago was its convenient location as a provisioning point for the merchantmen sailing between eastern ports and western destinations.²² However, Malta is highly unlikely to provision these ships, as the provision of water and food to sustain its own population is one of the inherent problems of this island.²³ If, on the other hand, adequate amounts of food were being imported, the diversion of some supplies to ships may not have been a problem and even generated profits for the local population.²⁴

Diodorus tells us that both Malta and Gozo were Phoenician colonies, and they were colonized because the islands provided well-protected harbors that could offer safety to ships in bad weather. We understand from Diodorus’ account that these harbors were also important to the Phoenicians because they “lay out in the open sea,” and because the inhabitants of the islands

were willing to offer (and receive) assistance.²⁵ According to Diodorus, the population of the archipelago quickly raised their living standards and wealth as they welcomed Phoenician ‘assistance’.²⁶ In my opinion, all we understand from this passage is that (1) the Maltese harbors were good, well-protected shelters for the occasional ship caught in a storm, and (2) the inhabitants of Malta became rich as they provided more and more assistance to the Phoenicians and developed new skills, becoming experts at certain crafts (and therefore increasing the commercial value of their local products). But this passage does not necessarily say that Malta was an excellent stopping point for *all* ships on their *normal* journies from the eastern to western Mediterranean.²⁷

Indeed, Malta was not likely to be a convenient provisioning point, as the wind and current patterns of the central Mediterranean make this archipelago an unlikely location for such a function. It is almost certain that ships of antiquity sailed following the counter-clockwise current of the Mediterranean. By doing so, the single-square-rigged ships depending on their quarter rudder for steering could sail with the steady northerly winds prevalent in summer months (Fig. 12).

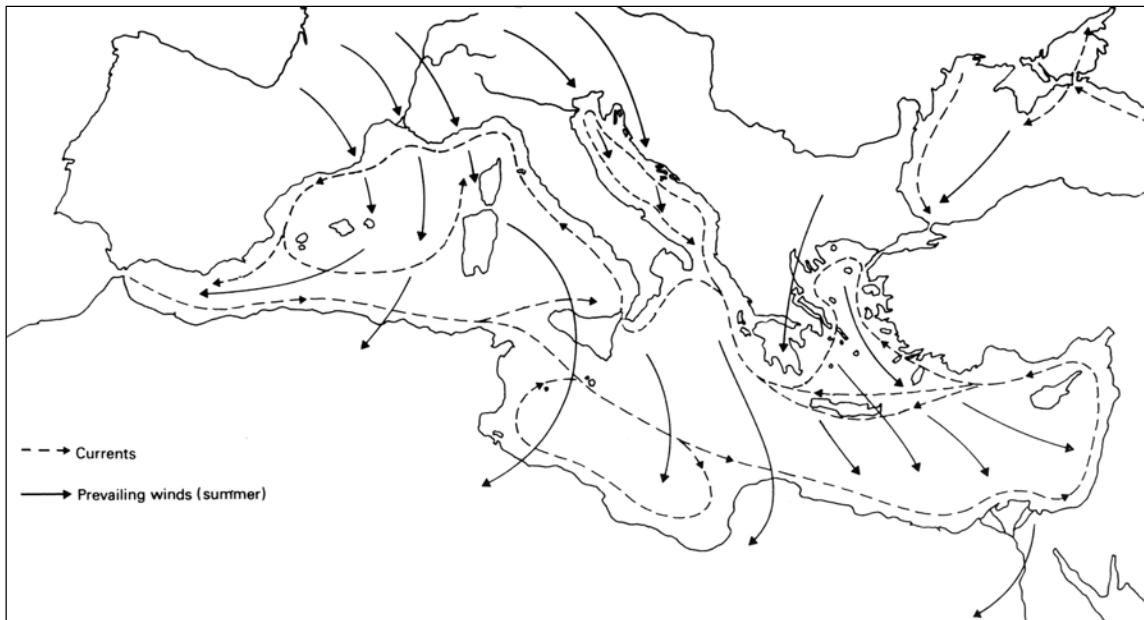


Fig. 12. Wind and current patterns in the Mediterranean Sea (after John H. Pryor, “The Geographical Conditions of Galley Navigation in the Mediterranean,” in *The Age of the Galley*, ed. Robert Gardiner (London, 1995), p. 206).

It is easier for a sailing vessel coming from the east to hug the Peloponnesian coast and cross the Ionian Sea towards Sicily. The sailing routes diverge to the north of Sicily, through the Straits of Messina, or along the southern coast of this island. The Straits of Messina are known to be a dangerous passage, but this did not prevent frequent navigation through this area and the establishment of trade routes with flourishing port cities along the northern coast of Sicily.²⁸ For the Phoenician ships, it is clearly easier to reach Ischia, Sardinia or the colonies clustered on the northwestern part of Sicily if they crossed the Straits of Messina, due to the nature of the wind and current patterns in the Tyrrhenian Sea.²⁹ On the other hand, the channel between Sicily and North Africa, described as a “wide and dangerous stretch of sea” by Cicero, is characterized by

currents in the west-east direction (Fig. 12), and even though these currents are not very strong, it is always harder to sail against them.³⁰

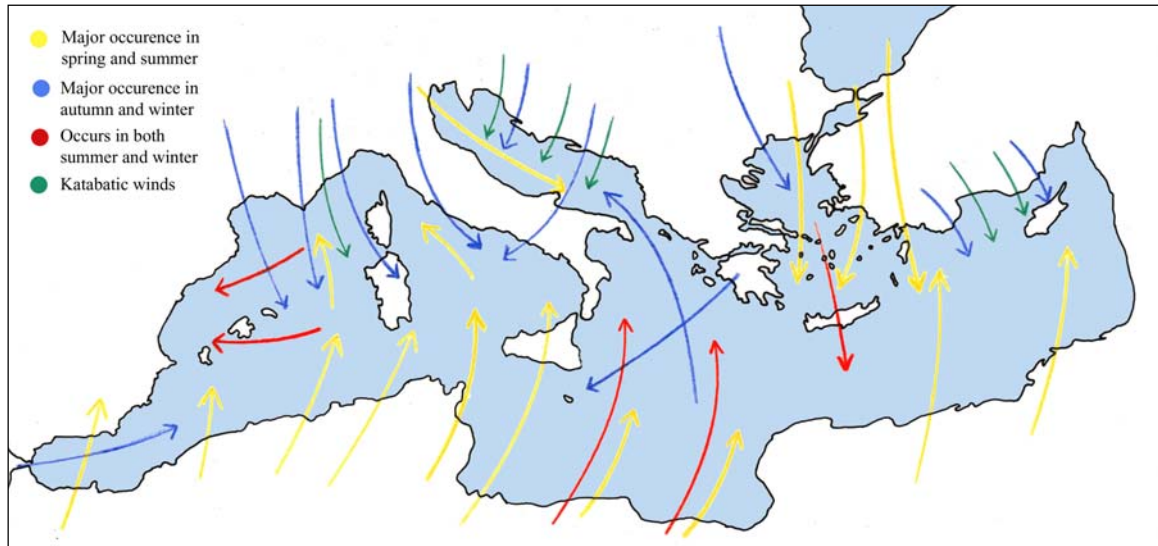


Fig. 13. Prevalent local winds in the Mediterranean. (after John H. Pryor, “The Geographical Conditions of Galley Navigation in the Mediterranean,” in *The Age of the Galley*, ed. Robert Gardiner (London, 1995), p. 211)

Those ships that sailed along the southern coast of Sicily, against the current, could easily end up in Malta, as the prevalent winds are typically from the north and northwest in this region. Therefore, once a ship came to Malta, it is likely that it would have difficulties sailing back to the route that followed the southern coast of Sicily, going west, because this would mean that the square-sailed vessel would have to sail tacking against the wind and against the current. No doubt, the local winds (Fig. 13) and coastal breezes in this region might have helped this crossing at certain times of the year, but a ship that came to Malta was likely to have this port as its destination, or is likely to have fallen off track (possibly off Sicily) and have been dragged to Malta, pushed south by the northerly winds.³¹

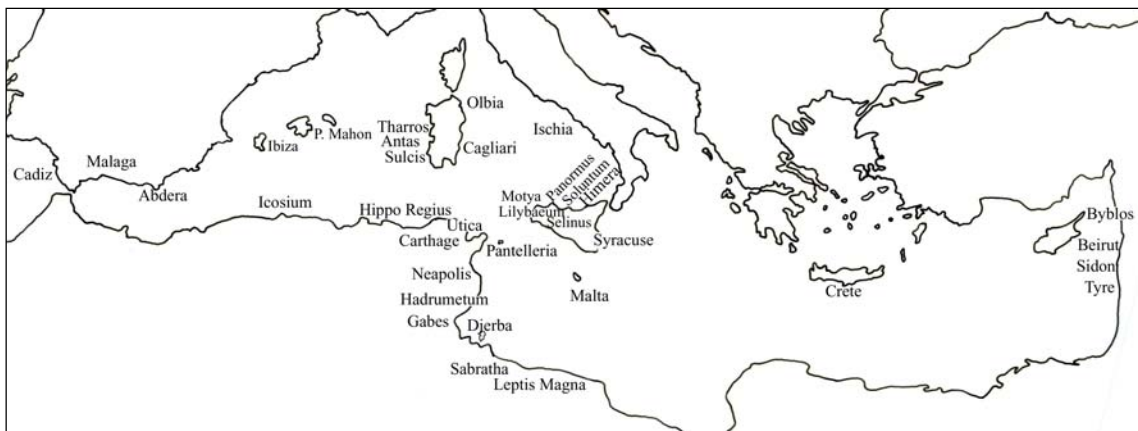


Fig. 14. Map of the Mediterranean showing the major Phoenician cities and colonies. (Map: author).

Thucydides' narration includes a story, which explains clearly that this scenario was encountered in antiquity. The Corinthian reinforcements sent to help Syracuse at the beginning of the spring of 413 B.C. could only arrive at the beginning of August, as they were “thrown to Libya” by the wind. This fleet had to follow the coast of Cyrenaica until Neapolis (south of Cape Bon), from where they could cross directly to Selinus, and that crossing took two days and one night (Fig. 14).³² This particular incident clearly illustrates the difficulties and dangers of the passage, and why the northern passage would have been preferred. All that said, one has to remember that the distance between Malta and Sicily is only about 100 kilometers, and even though a ship certainly may have had difficulties sailing west or north from Malta, it really was not such a prohibitive distance.

Wind and current patterns forced the ships loaded with products and raw materials of the western Mediterranean to follow the only feasible return route along the African coast (Fig. 15).³³ However, after the fall of the Phoenician cities of the East in the mid-sixth century, the nature and organization of these trade routes changed considerably, as the Punic commercial enterprise became more concentrated in the western basin of the Mediterranean. The Punic colonies in Sicily continued to maintain their connection with North Africa, but this connection

between the Sicilian colonies and Africa was very unlikely to have gone through Malta, as it was simply not feasible and/or practical to do so due to wind and current patterns.

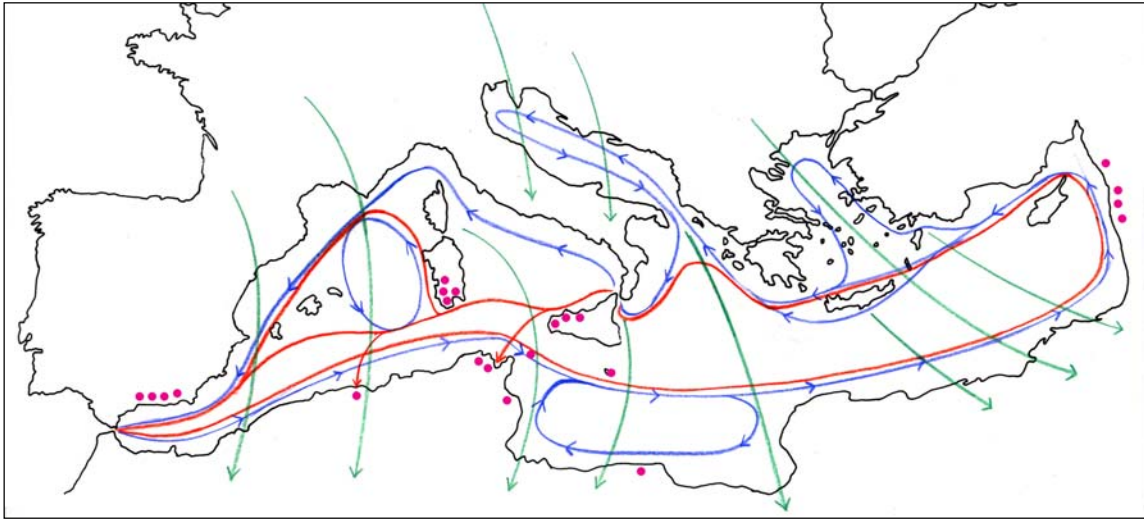


Fig. 15. Major Phoenician colonies in the western Mediterranean in relation to the wind and current patterns. (Map: author, based on the information provided in Aubet, *The Phoenicians*, p. 161-162, figs. 28-29; Pryor, "The Geographical," p. 206).

In summary, trade routes connecting the eastern and western Mediterranean ports developed according to the environmental parameters briefly described above, as well as the locations of profitable markets and resources.³⁴ It is known that Greek colonizers from Euboea and the Phoenicians cooperated in the harvesting of Italian natural resources during the eighth and seventh centuries B.C. There is also archaeological material to allow the interpretation that there were Phoenician workshops in Etruria manufacturing trade goods to be bartered for Etruscan silver, or to be offered as prestigious gift items to secure the cooperation of the local Etruscan chieftains who controlled access to native sources of silver.³⁵ The fact that most Phoenician-Punic colonies in Sicily are on the north and northwestern coast of the island, and the archaeological evidence of direct trade between the Phoenician cities of the Levant and

Northeastern Italy (Ischia and Etruria) as early as the eighth century B.C. point to the importance, as well as the obvious convenience of the northern route that crossed the Straits of Messina instead of circumnavigating Sicily.³⁶

Therefore, since the objective of Phoenician colonization of Malta cannot be the exploitation of the natural resources or the convenience of these islands as a provisioning point, a possible explanation for Phoenician interest in controlling such a remote area might lie in the way the economic structure of the central Mediterranean was organized. According to Gonzales, the reason for the colonization of Malta is likely to be related to the establishment of Greek colonies on the southeastern coast of Sicily, bringing a certain commercial and economic segregation in this period, leading to increased competition and a need for protecting claims over certain routes and perhaps commodities.³⁷

City-states of mainland Greece, the Aegean islands, and Ionia started to establish colonies in several areas of southern Italy and Sicily in the eighth century B.C.³⁸ The reasons for the Greek colonization are complex, but may have been caused by the inability of the Greek landmass to sustain a growing population.³⁹ These Greek colonies must have established contacts with the Maltese Islands as early as the eighth century, and Greek pottery is so abundant in the seventh-century Maltese archaeological contexts that several modern scholars were led to believe that it represented evidence for the Greek colonization of the island.⁴⁰ The growing number of Greek colonies and the beginning of a second generation of colonization initiated by the original colonies increased the population and settlement density in Sicily, creating competition for natural, agricultural, and commercial resources. Two of these colonies are of special significance in understanding the dynamics in the area and their effects on Malta. According to Gonzales, the foundation of Greek colonies at Himera and Selinus in the middle of the seventh century B.C. was of special interest for Phoenicians in Malta.⁴¹ It is likely that the

establishment of Selinus was an effort of the Megarans to control the route following the southern coast of Sicily, while the Zankleians aimed to spread their influence along the northern passage by establishing Himera.⁴² According to Ciasca and Gonzales this Greek expansion into strategic areas could have been countered by the establishment of a Phoenician base in Malta for patrol ships that controlled the route along the southern coast of Sicily.⁴³

According to this hypothesis, while Malta played a peripheral role in the development of the Phoenician-Punic realm in the western Mediterranean, its distance to the other colonies, its small surface area to sustain a sizeable population, and its general geographic isolation inhibited its development as a large naval base or an important commercial center.⁴⁴ Therefore, the Maltese Archipelago remained a small garrison that presented a threat to competitive merchant shipping, providing a safe harbor for Phoenician ships in distress, and contributing some local products for commerce.⁴⁵ Based on archaeological signs of the non-violent colonization of the island, it is unlikely that the fortifications discovered around certain Phoenician settlements were measures taken against the Maltese population. Therefore, it is clear that the protective measures were taken against outside assaults, and this could be either by the ships of the Greeks, the Etruscans, or pirates of either origin.⁴⁶

Rise of Carthage and the Isolation of Malta

Excavations in Malta revealed several objects of Phoenician origin, pointing to a direct trade or navigational connection with the Levantine coast.⁴⁷ According to Moscati, the similarities in pottery styles, in crafts, in language and writing, as well as the permanence and persistence of religious features of eastern origin in Malta, all point to a direct eastern connection established in the early phases of Malta's colonization.⁴⁸ Although Malta was only on the fringes of the developing Phoenician-Punic commercial network, the existence of archaeological

objects of Ionian and Aegean origin in archaeological contexts suggests that the island might have functioned as a small base that controlled the route passing through the south of Sicily, while Ischia controlled the more substantial traffic going through the Straits of Messina.⁴⁹

Because of the scarcity of resources in Malta, it was difficult to find goods to exchange with an outside source, but the Maltese Islands eventually became a modest part of this Phoenician trade system.⁵⁰ We do not know for certain what products the Maltese Islands offered in exchange for imported goods, but the possibilities include cloth, salt, ceramics, and carved ivory jewelry and ornaments made out of imported tusks.⁵¹

The best-known Maltese export in the Phoenician period is likely to have been textiles. Even though references to the Maltese textile industry all date to the Roman period (see Chapter V), it is possible that production started during the Phoenician period or even earlier. Unfortunately, because this industry by its nature leaves few traces and because textiles are not shipped in containers, it is very difficult to detect its trade in the archaeological record. Analysis of rare archaeological textile samples from Malta showed that the raw material used for Maltese textiles was flax. Flax was presumably imported to Malta, since its cultivation requires a great supply of water, which is in short supply on the island.⁵² But, it is likely that the process of transforming flax into linen and the production of linen garments for exportation took place on Malta.⁵³

With the loss of the political autonomy of the Phoenician cities of the east in the mid-sixth century, Carthage, the most prosperous and powerful of the western colonies, assumed the role of champion and leader of the western colonies. As a consequence, the Maltese Islands lost their importance, since the commercial and military routes that joined Carthage to Sicily and Sardinia evidently did not pass through Malta, which in turn became a cul-de-sac bypassed by

historical and, consequently, cultural development.⁵⁴ If Malta was a provisioning point for ships coming from the eastern Mediterranean going west, that function ended with the fall of Tyre in 573 B.C. Without the Phoenician cities of the east, the east-west route that followed a course close to Malta must have been abandoned. It is also likely that the Messina passage became easier to access for Punic ships that continued to be involved in eastern trade, especially after the fourth century, due to the suspension of hostilities between the Greeks and the Carthaginians in consequence of the political developments in Greece, namely its invasion by Alexander the Great and its incorporation within the Hellenistic empire. The inhabitants of Malta, who depended completely on this traffic for the marketing of their products, as well as their outside contacts of all types, were left in marginal and isolated territory.⁵⁵

The appearance of ceramics and amphoras originating from Gela, Syracuse, and Taranto, as well as pottery from Greece and Ionian islands, suggest that the population of the Maltese Islands received food and other necessities from Sicily, Italy and Greece. It is possible that in the absence of Phoenician-Punic provisioning, the islands turned to the close-by Greek colonies of Sicily.⁵⁶ Another difference that occurs at the end of the fifth century B.C. is the further spread of burials throughout the island, suggesting transformation into a predominantly agrarian pattern accompanied by rural development.⁵⁷ However, it is possible that this turn to agriculture was not enough to provide sufficient food for the increased population of the island, since in the third century B.C. we see migrations of the inhabitants of Malta to other places in the Mediterranean such as Lilybaeum and Ibiza.⁵⁸ It is also possible that the rising piracy of the Tyrrhenian Sea in the fifth and fourth centuries B.C. expanded into southern Sicily, affecting communications of Malta with Sicily, and compelling the former to be self-sufficient in terms of food production.⁵⁹

The development of the struggle between the rising power of Rome and its major competitor Carthage led to the outbreak of the conflict known as the First Punic War (264-241 B.C.). The rising insecurity of the Maltese population can be seen in the construction of a complicated system of watchtowers and defensive walls around important structures such as the temple area of Tas-Silg and more humble dwellings such as the rural farm of Saint Paul Milqi. Finally, a Roman force of unknown magnitude took over control of the Maltese Islands in the early years of the Second Punic War (218-202 BC). However, archaeological evidence shows that in the early Roman period the Phoenician-Punic culture was hardly affected by the new rulers and was slow to disappear.⁶⁰

Summary

Archaeological evidence shows that there was a direct connection between Malta and the Phoenician cities of the Levant, especially during the period of Malta's initial colonization in the seventh century B.C. Archaeological study of the following period gives the impression that the island was quickly reduced to an isolated state and maintained a lateral position within the western domain of the Phoenician presence. It was, therefore, less exposed to political and cultural developments, thus preserving certain primary characteristics of its early Phoenician culture.⁶¹ It is likely that the main function of the inhabitants of the Phoenician colony in Malta was to provide some very basic repair and maintenance services for damaged ships, produce certain products such as dyed textiles, and maintain their own subsistence.⁶²

The reason for the Phoenician colonization of the islands in the first place is difficult to understand, as the absence of natural, mineral, and agricultural resources cancels the possibility of commercial interest. Therefore, the only plausible explanation for continued Phoenician and Punic occupation of the island lies in its strategic importance, potentially capable of controlling

the east-west trade route that follows the southern coast of Sicily. This importance becomes more significant during times such as the seventh century, when there was increased Greek colonization along this route. On the other hand, the strategic importance of Malta fluctuates depending on regional military, imperialistic, and commercial developments. With the colonization of Sicily by the Greeks, Malta assumed for the first time a strategic importance in the contest between Phoenician and Greek commercial and military power blocs for control of the maritime routes.⁶³ In all, the archipelago was a strategically-located port-of-call in the wider Phoenician maritime network in the seventh century. In the Punic period, it became a peripheral and isolated colony, representing a minor element in the evolution of a Phoenician-Punic world struggling for survival against the Greeks and, later, the Romans.⁶⁴

CHAPTER V

ROMAN PERIOD

The Roman Empire gradually became the biggest consumer and supplier of an immense variety of materials, providing enormous opportunities for trade and commerce in the Mediterranean.¹ Agriculture was the primary occupation of people throughout the Empire and was the most important industry. Food was the single most significant item of production, consumption, and trade, both in volume and in value. The production surplus was either exchanged at the local market for goods and services or was surrendered as taxes paid to the state and rent paid to landowners. This transfer of agricultural surplus from producers to consumers through trade, taxation, and rent formed the foundation of the Roman economy and of the Roman State. Although the Romans could master the sea when there was a pressing need for it, they were not eager to be engaged in such activity indefinitely. The Roman system of commercial communications across the Mediterranean was administrated in a very efficient way for centuries.² After the end of major conflicts, the burden of patrolling the seas was entrusted to diminutive squadrons of fast and small galleys called *liburnians*, and most merchants and sailors who continued to provide Italy with goods from all parts of the Mediterranean were non-Latin provincial merchants, mainly Greeks and Phoenicians.³

Typical imports of Italy were grain, meat, and raw materials such as wool. Merchants brought silk, glassware, spices, and jewelry from the provinces of Asia, Syria and beyond. Luxuries such as papyrus from Egypt, emeralds from Scythia, and perfumes and cosmetics from Arabia flooded in from the exotic margins of the Empire and beyond.⁴ Rome, Alexandria and Antioch became the Empire's greatest commercial centers. The tremendous growth of trade was

stimulated by a number of related factors such as the development of extensive road networks, provision of safety at sea via the organization of a patrol system, establishment of efficient coinage, and the growth of the Empire to include new markets.

In the previous chapter we saw that Malta became increasingly isolated from the Punic domain and gradually developed relations with the neighboring Greek settlements of Sicily.⁵ The absence of Etruscan pottery in Malta reveals that the island was isolated from the developments in the western Mediterranean basin and the activities of Etruscan traders or Tyrrhenian pirates.⁶ With the beginning of Roman occupation and changes in the socio-political structure of the Mediterranean, Malta lost what was left of its strategic importance and became just another small island within the quiet *Mare Nostrum*.⁷ In the following sections we will examine how this new political and economic environment affected the archipelago.

Literary Sources and Archaeological Evidence

The earliest Roman literary sources relating to Malta are accounts concerning the Roman capture of the islands, the principal account being that of Naevius.⁸ According to his reports, the Roman army crossed to Malta for the first time and laid waste to the island during the First Punic War.⁹ According to the historical analysis of Rizzo, this attack is likely to have taken place in 255 B.C., when a Roman fleet passed through these waters under the command of the consuls Servius Fulvius Petinus and Marcus Aemilius Paulus.¹⁰ This information is repeated by the fifth century A.D. writer Paulus Orosius, with the exception of the exact name of the consul in charge of the forces that destroyed Malta.¹¹

The expedition described by Naevius was possibly a simple raid rather than a conquest, since Rome had to attack Malta again during the Second Punic War. Livy states that the Maltese

Islands were captured (from the Carthaginians) by a Roman fleet, which crossed over from Lilybaeum in 218 B.C.¹² The Roman forces were under the command of consul Tiberius Sempronius Longus, and the small Carthaginian garrison of 2,000 men, under the command of Hamilcar son of Gisco, surrendered without much struggle. It seems that the conversion into Roman rule was peaceful and uneventful, and was simply due to the fact that the Punic force was too small and lacked a fleet to protect itself.¹³

After the fall of Carthage in 146 B.C. and the creation of the Roman province of Africa, Malta lost its last shreds of strategic significance. The fact that the islands passed into Roman hands but continued to preserve their earlier cultural characteristics with the help of their isolated position is apparent in the archaeological record, which reflects a very slow and gradual change (due to the Romanization) seen in the material remains.

Pseudo Skylax (fourth century B.C.) mentions that Melite was a city with a harbor, and Gaulos was (*only*) a city.¹⁴ The archaeological evidence also supports the existence of only one city on each island throughout the Roman period. The city of Melite was where the modern settlement of Mdina/Rabat is located. This area has been inhabited since prehistoric times because it is the only elevation on the island, visually controlling the territory around it, is close to both major harbors at Marsaxlokk and the Grand Harbor, and in proximity of the majority of the water springs on the island.¹⁵ Based on excavation results, it seems that the three nucleated settlements (Mdina/Rabat and its harbor settlement in Marsa, as well as Victoria in Gozo) essentially sustained their previous sizes. There are indications that the Rabat settlement was the most populated center and was probably fortified.¹⁶ In his 1915 article, Ashby provides detailed descriptions of a first century B.C. Roman villa with a peristyle excavated in Rabat, which was decorated with mosaic floors and marble sculpture.¹⁷ This villa was inhabited for over a century and was re-furnished with new decorations (portraits) in the first century A.D.¹⁸

Archaeological evidence also agrees with the historical record in terms of reflecting clearly the continued isolation and detachment of Malta from the Roman sphere of influence, even centuries after its ‘conquest’ (Fig. 16). The earliest Latin inscription, one of a public nature, is dated to the beginning of the imperial period, two centuries after the beginning of the Roman era in Malta.¹⁹ In addition to this inscription, a coin minted in Malta at the end of the first century B.C. bears the Latin legend MELITAS.²⁰ According to Bonanno, the inscription is an official document in honor of the governor of Malta, while the name of the island appearing in Latin on the coin can be explained as part of the standard propagandistic function of Roman coinage.²¹ Phoenician-Punic characteristics also survive in the forms and production techniques of the ceramic repertoire on the islands for about two more centuries after the ‘Roman conquest’.²²

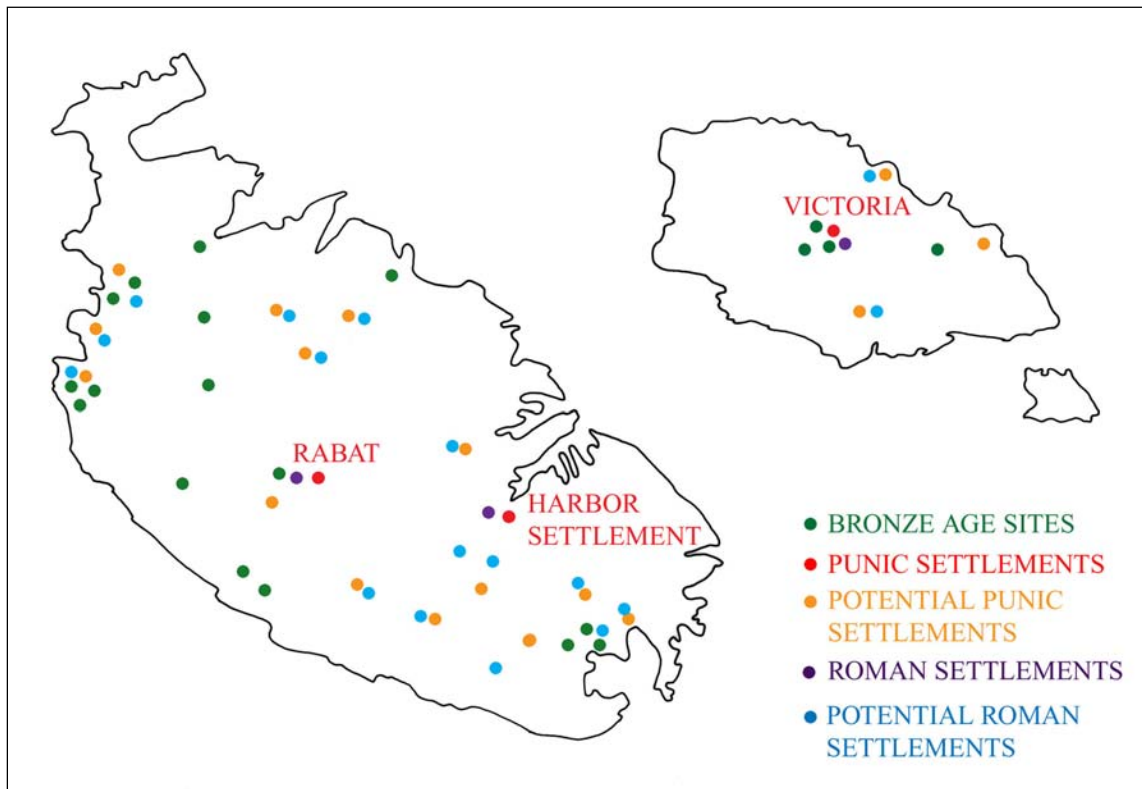


Fig. 16. Locations of terrestrial sites in Malta during and before the Roman era. (Map: author).

A number of other Roman writers mentioned the Maltese Islands. These are generally very short references simply mentioning the location of the islands (i.e., Ptolemy²³). Fortunately, we have two writers who provided more detailed information concerning social, political and economic life in Malta during the first two centuries of Roman rule.

Diodorus Siculus was a Roman historian who was born in Agyrium, Sicily. He wrote his major work *Bibliotheca Historica* in the first century B.C. (ca. 90-21 B.C.). *Bibliotheca* consists of forty books and is a compilation of the information collected during Diodorus' travels through Asia and Europe. Historians are generally cautious in accepting Diodorus' information as reliable, but the parts of the *Bibliotheca* that were based on Diodorus' personal observations are fairly consistent. Therefore, the information regarding Malta and Gozo, presented in book five, could reflect the truth since Diodorus is likely to have been familiar with the products of the Maltese Islands.²⁴ From *Bibliotheca* we learn that the inhabitants of Malta were "blest in their professions" and the artisans were "skilled in every manner of craft." Diodorus also points to the importance of the textile industry and linen production (that had possibly begun during the Phoenician period), and the superior quality of the product that was "remarkably sheer and soft."²⁵ This passage explains that the first century B.C. inhabitants of the islands achieved their skills through cooperation with the Phoenicians.²⁶ It also seems clear that via the sale of these local luxury products the inhabitants increased their wealth and lived in exquisite houses "adorned with cornices and finished in stucco with unusual workmanship." It is doubtful that Diodorus visited the islands himself, however, since he mentions that the Island of Gozo was also "adorned with well-situated harbors," which simply is not the case.

Cicero also talked about textile production in Malta, which is mentioned as one of the examples of Verres' crimes.²⁷ In this passage written around 70 B.C., Cicero states that Verres turned this island, that he has not visited even once, into a textile factory, weaving and making

women's dresses, for three years.²⁸ It is understood from Cicero's orations that Verres sold the Maltese made linens to Rome, presumably for great profit.²⁹ It is also understood from this passage that this production was carried out in the only town of Melita, and a secondary location of importance on the island was "an ancient temple of Juno on a headland that was not far from the town."³⁰ This temple, which included valuable artifacts (ivories, ivory sculpture and other art objects), was plundered by Verres, and the representatives of the people of Melita filed an official complaint. According to Cicero, this temple's sanctity was not violated during the Punic Wars and was respected even by the "pirate hordes."

It is clear that Cicero's aim was to emphasize the cruelty of Verres' crime when he stated: "that the place where our enemies have often landed and the pirates are in the habit of passing winter after winter, without laying hands upon it (the temple)."³¹ His statement suggests that enemies of Rome landed in Malta frequently, and that pirates wintering there was a 'normal' situation. It is likely that Malta was indeed a well-known pirate base, and even the pirates considered it 'home' as they did not attack the valuable contents of the temple.

Historical sources speak of increased piracy in the Mediterranean, especially between the third and first centuries B.C. During this period, no coastal town and merchant ship anywhere on the Mediterranean was safe, but certain areas such as the Tyrrhenian, the Adriatic, and the Ionian Seas were particularly dangerous.³² The pirates known as the Tyrrhenians were possibly a combination of Etruscans, Italians, Sardinians, and Greeks, all living around this sea. Illyrians inhabited the northeastern coast of the Adriatic and terrorized this area until the first century B.C. The piracy in the Mediterranean and in the waters surrounding the Italian peninsula reached such a level that the grain shipments to Rome were being disrupted by these activities, creating a danger of famine in the city. The Romans took certain measures to control the Illyrian pirates, whose fleet reached the size of 220 ships, between the two Punic Wars (241-

218 B.C.), but could not establish control in the area until the establishment of a permanent patrol later in the first century B.C.³³ Farther to the east, the Cretans were notorious pirates and the pirates of Cilicia became one of the greatest problems of the Romans in the first century B.C.³⁴ The first serious attempt to terminate piracy in the Mediterranean was made in 67 B.C. by the assignment of Pompey to the task.

The years immediately before the activities of Pompey were the worst times of pirate attacks, which devastated the countryside, especially in Sicily.³⁵ To illustrate Verres' unsuccessful conduct as the governor of Sicily, Cicero reports that pirate attacks on Sicily, especially between 73 and 71 B.C., were a constant problem. It seems possible that at least some of these pirates were those who wintered in conveniently nearby Malta.³⁶ According to Busuttil, Cicero's account of pirates wintering in Malta points to a type of symbiotic relationship between Malta and the pirates, who possibly provided protection to the island, which in turn explains why the temple was never violated.³⁷ It is possible that the absence of a standing Roman fleet or a patrol force compelled the Maltese to seek an arrangement with the pirates to avoid destruction. Busuttil also points to the possibility that the small population of the islands must have been socially (and culturally) affected by these winter guests, who, without a doubt, frequented the harbors in the summer as well.³⁸

Piracy must have been beneficial for the inhabitants of Malta. Some possibly became pirates themselves and the island may have served as a market for the plundered goods of the pirates (i.e., slaves and captured goods), contributing to the island's economy. Another economic activity could have been to provide repair, maintenance and provisioning services for ships harboring or wintering in Malta.³⁹

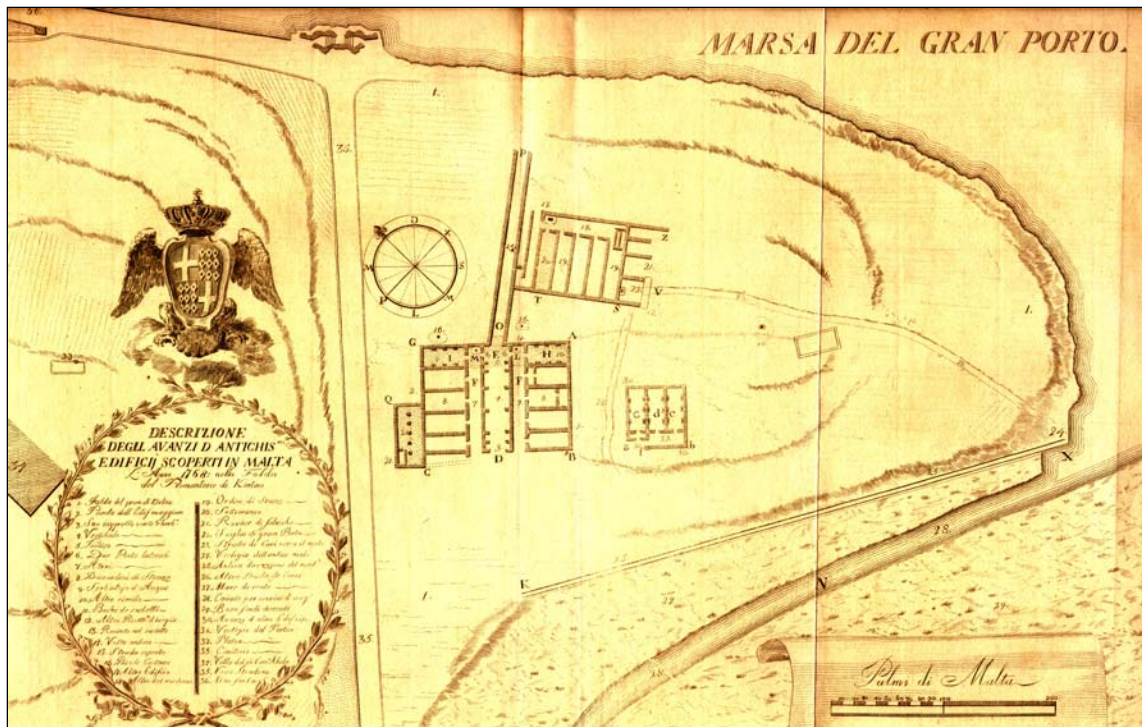


Fig. 17. Warehouses in Marsa as drawn by Barbaro in 1794. (From: Barbaro).

Remains of certain buildings that date to the Roman period were still standing in 1768 at one extremity of the Grand Harbor near Marsa.⁴⁰ Carl' Antonio Barbaro's careful examination and description of these structures provide the only information available about them (Fig. 17).⁴¹ Barbaro believes that the buildings were first constructed by the Phoenicians, and based on the ash deposits he observed in the urns that were recovered from this building, he thinks that they had funerary functions in the Roman period.⁴² In explaining the function of these buildings, Barbaro points out that at least one of them possibly had a harbor-related function, presumably based on the inscriptions and the path or cart-ruts leading to the sea.⁴³ Ashby mentions that warehouses containing several hundred complete amphoras were found near Corradino Hill.⁴⁴ Of these amphoras, 24 bore graffiti in Greek, and coins found with the amphoras date the assemblage to between the third century B.C. and the ninth century A.D.⁴⁵ Possibly because of

the other finds mentioned by Barbaro and Ashby (i.e., parts of marble columns and sculpture fragments), scholars are generally inclined to date this long-lost find to the Roman period.⁴⁶ What is described by Ashby as “a quay-wall of large stones,” was found in connection with these buildings.⁴⁷ They were reported as “buried in levels containing nothing but Roman sherds.”⁴⁸ Thus far, structures that may have served as warehouses, pointing to the possibility of a harbor settlement, have only been identified at this location. Accordingly, it is likely that there was only one commercial center in the Maltese Archipelago located at Marsa. Archaeological finds from underwater contexts possibly dating to the Roman period are scattered around the islands, but this may only point to the dangerous sailing conditions around the islands rather than to the use of other (and much less convenient) bays for commercial purposes (Fig. 18). I would also like to emphasize that the existence of a lead anchor stock in a particular location does not necessarily mean that there is a wreck there.⁴⁹ Moreover, sometimes even the existence of several wrecks in a certain location does not necessarily mean anything more than that there were navigational hazards in that area. Therefore, one has to be careful in assessing the archaeological evidence and the context of the artifacts before reaching conclusions about the economic structures and trade based solely on interpretations of underwater material.

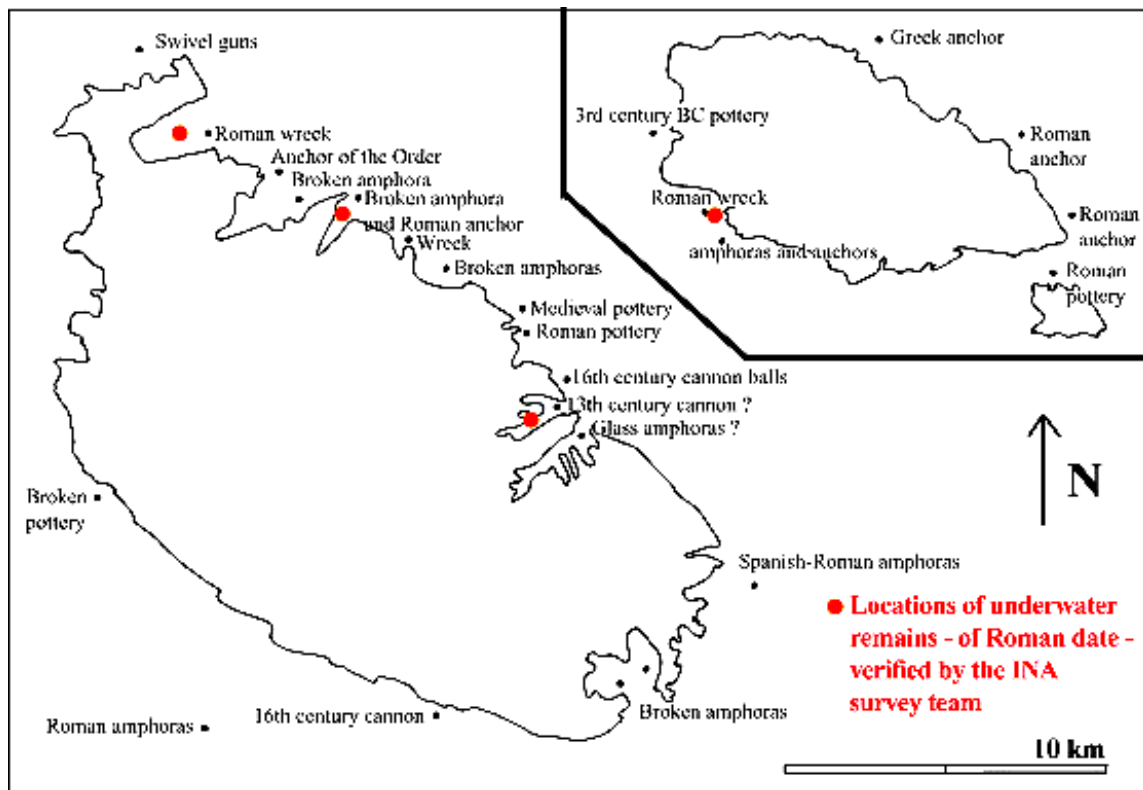


Fig. 18. Locations of underwater remains in Malta based on the information provided by Scicluna [After: *Carta dei rinvenimenti sottomarini lungo le coste dell'isola di Malta*, *Missione Archeologica Italiana a Malta* (Rome, 1965)].

There have been many Roman-era ship-related archaeological finds around the Maltese Islands. The majority of these are lead anchor stocks recovered by fishermen and sport divers, and 'reported' to the Museum, but generally kept by the finder.⁵⁰ As discussed above, the presence of a lead anchor stock does not necessarily indicate a shipwreck site, as it is well known that ships may lose anchors for several reasons and still avoid shipwreck.⁵¹ It was also the practice of ships in severe distress to jettison cargo in order to lighten the vessel and avoid shipwreck.⁵² Artifacts on the seabed do not necessarily mean a shipwreck occurred at that site. Some objects, broken or intact, are simply discarded from a ship while it lays at anchor, or while under sail. Therefore, it is necessary to be careful in identifying the find-spot of an individual

amphora or an anchor stock as a shipwreck or even an anchorage site.⁵³ Ceramics and anchor stocks are often found in locations of popular sport diving activities (and diving schools) or areas where there are dangerous reefs or other natural hazards (i.e., strong currents and dangerous coastal breezes) that caused ships to lose their anchors since they first began sailing around these islands. Figure 18 shows the areas investigated by the team from the Institute of Nautical Archaeology, based on previous reports to the Museum. We were able to determine with certainty that only the Mellieħha Bay and outer Xlendi reef represented possible shipwreck sites, and collected broken pottery fragments of Roman date in the Marsamxett harbor and Salina Bay (material of Roman date located by INA is marked in orange).⁵⁴ For the latter two, since the archaeological finds only represent a few broken pottery fragments, it is impossible to determine whether or not these locations represented anchorages or harbors with any economic importance.⁵⁵

Even less is known about Roman-era harbors and settlements of the island of Gozo. The main town of Gozo stood almost in the center of the island and was almost certainly at Victoria (also known as Rabat).⁵⁶ Some information comes from eighteenth-century writers who noted the existence of architectural elements mostly in the form of fragments. Inscriptions and a series of architectural pieces – cornices, capitals, shafts and bases of columns – were noted by eighteenth-century writers such as G. Agius de Soldanis and Jean Houel, lying about in the streets of Rabat and Cittadella. These suggest that the town of Gaulos was prosperous enough to possess public and religious buildings adorned with marble architectural decoration.⁵⁷ Markoe suggests that the coastal settlement of Gozo was at Mgarr, but this is highly unlikely because before the construction of the modern breakwater there, this bay was not a well-protected one.⁵⁸ Xlendi, Mgarr, Marsalforn, and Ramla Bays are likely to have been significant in the economic

infrastructure of Punic and Roman Gozo, with roads from these coastal areas converging at the inland site of Victoria.⁵⁹

Figure 18 shows the locations of underwater material around the island of Gozo. The only possible shipwrecks discovered at Gozo are outside Xlendi Bay (Appendix A).⁶⁰ The archaeological material there dates from the third century B.C. to the fifth century A.D. However, this does not indicate the economic importance of Xlendi Bay, but shows clearly that the entrance to Xlendi Bay was a dangerous spot for ships throughout history. On the other hand, it is hard to determine what this underwater assemblage actually represents. As discussed in Appendix A in detail, the only conclusion that can be derived with certainty is that ships carrying large cargoes sailed around the islands. That some of the amphoras dating to the Roman period may be of Maltese production points to the fact that Malta exported either empty containers or some liquid product (i.e., olive oil, wine, or honey inside the jars).⁶¹ References to oil production in Malta, and archaeological remains of oil presses from the Roman period indicate that if these amphoras were full, they were likely to have included olive oil.⁶² Future studies of the organic remains and pollen preserved in the amphora contents from this site may help to determine the products carried in them.

Scarcity of underwater archaeological remains around Malta, and the absence of detailed scientific studies on existing wrecks (i.e., the shipwrecks off Xlendi) limit our knowledge about the role of the Maltese Islands in the greater Mediterranean economy during the Roman period (Fig. 19). However, the fact that the Maltese Islands are almost absent in contemporary literary works points to their peripheral state in the Roman domain. After Cicero's references to Malta to provide proof to incriminate Verres, Malta disappears from written history for centuries.⁶³



Fig. 19. Salt pans of unknown date at Xlendi. (Photograph: author).

The wrecking of Saint Paul's ship, described in the Acts of the Apostles, constitutes the next instance where Malta reappears in written sources.⁶⁴ There have been countless discussions about the interpretation and reliability of the information presented in this account of Saint Paul's shipwreck off Malta, possibly around the year A.D. 60.⁶⁵ It has been debated whether or not the journey described by Luke was an actual journey undertaken by Paul.⁶⁶ Conzelmann believes that the events of this journey are full of realistic details and really must have happened at some time to somebody, but it was one of those stories of sea voyage and shipwreck current in literature roughly contemporary with the time of Luke.⁶⁷ There also are different views about the identification of Malta as the shipwreck site, since some biblical scholars believe that Saint Paul's ship drifted to the north into the Adriatic and ran aground in Mljet (Meleda) off the Dalmatian coast, to the Island of Cephalonia in the Ionian Sea off the Greek coast, to the Island of Capri off the Italian coast, or even to the city of Mitylene on the Island of Lesbos in the Aegean.⁶⁸

However, it is generally accepted that Saint Paul's ship is much more likely to have drifted to Malta with the prevailing northeasterlies.⁶⁹ Apart from all the different debates, there

are certain types of reliable information one can gather from the narration of Saint Paul's journey, which can be analyzed in two major groups. The first type of information concerns the general organization of navigation and trade routes in this period. Saint Paul's route from the Levantine coast to Rome follows the direction of current in the Mediterranean, as reviewed in the previous chapter (i.e., following the Levantine coast and the southern coast of Asia Minor, reaching Crete and crossing the Ionian Sea towards the Straits of Messina).

The part of Saint Paul's journey after Crete is of special importance, as its detailed description provides information about navigation conditions in this part of the Mediterranean. The first problem encountered was the beginning of strong winds due to the late season (October) this ship was sailing in.⁷⁰ While sailing to a harbor called Phoenix on Crete for the purpose of wintering there, the ship was caught in an east-northeasterly wind called Euroclydon.⁷¹ The ship could not sail against this wind so they decided to let it drift with the wind, which pushed the ship towards Syrtis.⁷² Several measures were taken to secure the ship, such as taking the tender in (normally towed) and jettisoning some of the cargo and other heavy tackle of the ship to the sea in order to 'lighten' the ship.⁷³ After drifting in the Ionian Sea (*Adria*) for about thirteen or fourteen days, the ship finally came close to land.⁷⁴ As they approached the shore, the crew dropped four anchors from the stern of the ship in order to avoid hitting any rocks in the increasingly shallow depths.

The second type of information that can be retrieved from this passage is about the island of Malta itself. The shipwreck incident, which possibly took place in one of the bays on the coast of Malta, has caused great speculation in modern times and different ideas about the location of the event led several expeditions to seek the evidence of this biblical incident in the waters surrounding Malta.⁷⁵ According to the description in the Acts of the Apostles, during the last phase of the storm the only hope of survival seemed to lie in beaching the ship in a small

inlet. The crew of the ship cut all the anchor lines, abandoning the anchors on the seabed.⁷⁶ The ship was then driven aground and the people on board swam to shore, some holding on to floating pieces of the ship that was already breaking apart. The survivors encountered the “barbarous people” of the island, who were presumably the Punic-speaking Maltese locals.⁷⁷ The second group of inhabitants of the island was exemplified by the Latin-speaking man named Publius, “the chief man of the island,” who offered accommodation to Paul and his immediate companions (Luke, Aristarchus and Julius the centurion, and not to all 276 men on board) for three days after Paul healed Publius’ father. Paul healed other sick people on the island during the time he spent there, waiting for the sailing season to begin in order to continue his journey to Rome. Finally, three months later, they all left on board a ship named *Dioskouroi* (“sons of Zeus”) of Alexandria headed to Syracuse.

Apart from the obvious religious and cultural importance of this event on the future development of Maltese identity, culture, and other related traditions, Saint Paul’s shipwreck is also an event of great significance in recognizing the context of Malta in the Mediterranean Roman world.⁷⁸ First of all, one has to note the similarities in the drifting of the ship that carried Saint Paul to Malta and the story of the Corinthian reinforcements sent to Syracuse at the beginning of the spring of 413 B.C., and who drifted to Libya.⁷⁹ That ships pushing south with the northeasterly and northwesterly winds (depending on the season) ended up in the Gulf of Syrte is also supported by the sailors of Saint Paul’s ship’s reaction to the storm.⁸⁰

There is no doubt that the ship carrying Saint Paul ended up in Malta accidentally. Therefore, the authors who refer to Saint Paul’s ship coming to Malta from the east as literary evidence pointing to the existence of trade contacts with the eastern Mediterranean are mistaken.⁸¹ But based on the information, it seems that just like the ship, *Dioskouroi*, that took them on board at the end of the winter, some merchant ships did go to Malta to winter there. It is

also remarkable that the latter ship could not cross to Sicily throughout the winter due to dangerous conditions.

Numerous lead anchor stocks and collars of Roman type were discovered around the Maltese Islands, including the largest one ever discovered in the Mediterranean.⁸² An anchor stock that is of these dimensions would fit a wooden anchor about six meters long. Such large anchors are likely to have been carried by the very large bulk carriers of Roman times generally involved in the grain trade. There is ample literary evidence regarding the fact that Rome was dependent on grain shipped from the provinces, especially Egypt.⁸³ Just like the ship that carried Saint Paul from Alexandria, it is possible some of these grain ships ended up in Malta due to storms, or went there to supply the inhabitants of the island.⁸⁴ Therefore, it is likely that many ships drifted into these dangerous coasts by northerly storms and which did not have the island as their intended final destination. There is very little doubt that the Mellieha shipwreck dating to the second or third century A.D. shared a similar fortune with that of Saint Paul's. As the excavator of the site, Honor Frost puts it: "The ship, driven by a *gregale*, northeasterly wind, sank on the 'rock awash' in the middle of the bay."⁸⁵ However, the Mellieha Wreck's cargo (especially its glass) is likely to have originated in Italy, suggesting a route opposite to that of Saint Paul's ship.⁸⁶

The other valuable information the biblical passage provides regarding Malta is the very clear indication that the Maltese people still spoke Punic in the first century A.D. This not only signals the persistence of old traditions in Malta, but also the slowness of Romanization and the isolated state of the island. What cannot be determined with certainty from this account are, unfortunately, the aspects of greatest interest to nautical archaeologists. Firstly, this account clearly states that the ship ran aground in shallow water and disintegrated quickly, allowing the survivors to hold onto floating pieces of the ship. Therefore, it is almost impossible to find the

remains of this ship. Secondly, this account does not provide clear indication of where in Malta the survivors landed, so one can not know which beach was used for this purpose. And, thirdly, there is no indication that anyone was converted to Christianity during the three months Saint Paul spent in Malta. As Bonanno states “One must admit, however, that for the first three centuries of our era there is no evidence, not even archaeological, of the practice of the Christian religion (in Malta).”⁸⁷

The question of Christianizing brings us to the period following the division of the Roman empire into two parts: The western part, on the decline from the beginning of the fourth century until its collapse with the death of the last emperor of the west, Romulus Augustulus, in A.D. 476, and the eastern part centered in Byzantium, which was made the new capital of the empire by Constantine in AD 330. The literary sources do not throw much light on the vicissitudes of either Gozo or Malta during this period. It is possible that the Vandals and the Ostrogoths attacked and occupied the islands for a short time. Brown believes that both found themselves under the jurisdiction of the Byzantine Empire around A.D. 535 when Sicily was conquered by Belisarius, the general of Emperor Justinian.⁸⁸

Conclusions

It seems that Malta was attacked and destroyed by a Roman fleet around the mid-third century B.C., and then occupied by another Roman fleet in 218 B.C. Possibly beginning in the third century B.C., the island became a pirate hideout and a wintering base. It is likely that these pirates organized their attacks on Sicilian towns and merchant shipping in the Tyrrhenian and Ionian Seas from Malta. Consequently, the islands themselves were never subjected to pirate attacks; the sanctuary on the island was adorned with rich gifts, and the island economy

benefited through the marketing of pirate booty. On the other hand, the islands continued to be officially connected to Sicily and under the control of its governor.

The Maltese Islands were ultimately integrated into the Roman Empire and court cases regarding complaints of the Maltese subjects (i.e., incidents after the sack of the Temple of Juno by the governor Verres) were heard in Rome. From Cicero's accusations, we understand that governor Verres himself might have collaborated with pirates, and it seems possible that the Maltese population was terrorized both by the pirates and the governor who put them to work to produce linen garments (which he himself sold in Rome) and looted their temple. It is not clear how politics worked in the region, but based on the archaeological evidence it seems that the islands became even more isolated and impoverished at the end of the Roman period than before.

CHAPTER VI

LATE ROMAN AND BYZANTINE PERIOD

There is virtually no archaeological or literary record that provides information about social and economic developments in Malta during the period between Saint Paul's shipwreck in the first century and the sixth century. The few inscriptions dating to this period suggest only that an increasingly Romanized community that practiced emperor worship existed on the island.¹ But for the most part, the situation in Malta and the nature of its transition into the Byzantine period can only be indirectly deduced from the general trends of wider social, economic, and military developments in the Mediterranean to which Malta was exposed.

Between the late second and late third centuries, the Roman Empire began to show signs of decline. The Severan period (193-235) and especially the period immediately thereafter was defined by military anarchy leading to a succession of short reigns and eventually the rule of the soldier-emperors (235–284). Since the expansion to include Asia Minor, the Levant and Egypt, the cultural and economic centers of the Roman Empire were in the east. With the exception of Rome, the west remained largely rural and agricultural. Especially during the period of anarchy in the third century, social life declined in the Roman towns of the western provinces. On the other hand, the Roman aristocracy, whose secure lifestyle in large fortified estates of the countryside, flourished and eventually developed into medieval feudalism. The wealthy elites of Gaul and Britain owned estates worked by slaves and free Celtic peasants. They also developed a taste for luxury items such as silver, glass, and oriental goods.

When Diocletian emerged as an able and strong ruler in 284, he ensured the protection and reorganization of the empire by creating new, smaller provinces, marking a clear distinction

between the duties of military commanders and civil governors, and sharing overall control with peers by dividing the empire into western and eastern halves. Unfortunately, this experiment in power sharing lasted only a short time, and Constantine eventually reunited the Western and Eastern halves of the empire in 324.

As political power shifted to Constantinople, the new capital of the Eastern Roman Empire founded in 330, the church gradually replaced the declining civil authority at Rome. One of the major deficiencies of this new political entity in the east, later known as the Byzantine Empire, was that the first generation of rulers (i.e., before the fifth century) neglected the establishment of a navy, which, in turn, contributed to the loss of the western Mediterranean territories in the wake of the Germanic invasions.² The Germanic tribes who lived along the northern borders of the empire emerged as political and military powers at the end of the fourth century. In the 370s, the Huns invaded areas along the Danube River, driving many of the Germanic tribes into the Roman provinces. The emperor Valens was killed by the Visigoths at Adrianople in 378, and the succeeding emperor, Theodosius I, conducted campaigns against the Goths, but failed to evict them from the empire. After his death in 395, the empire was divided between his sons, Honorius (Western Roman emperor) and Arcadius (Eastern Roman emperor) but the West could not survive the incessant barbarian invasions. Under Alaric, the Visigoths sacked Rome in 410 and Spain and Southern France were occupied. The German, Odovacer, became the king of Rome in 476 after deposing Romulus Augustulus, the last Roman emperor in the West. In 493 the great Ostrogothic leader Theodoric established a kingdom in Italy but, more importantly, the Vandals captured Carthage and created a powerful navy that was the center pole of their naval kingdom that included North Africa, the Balearics, Sardinia, and Corsica.³ The eastern Roman provinces survived the fall of the Western Roman Empire in 476 and developed into what we today refer to as the Byzantine Empire.

In the western Mediterranean, the Vandal fleet controlled the seas and their piratical expeditions terrorized the western Mediterranean and southern Greece with little opposition.⁴ Ostrogoth efforts to establish themselves in southern Italy, Sicily and Sardinia were also supported by a smaller naval force that concentrated its activities in this area. It is possible that the Vandals and the Ostrogoths attacked or occupied the Maltese Islands for a short time but there is no evidence of permanent occupation.⁵ The Saint Bishop of Vita (in North Africa), Victor, writing around the middle of the fifth century mentions that several islands (Sardinia, Sicily, Corsica, Maiorca, Minorca, and Ebusum) were conquered by the Vandals.⁶ Based on the evidence suggesting that Malta became increasingly dependent on Sicily in the preceding few centuries, it is reasonable to suggest that Malta was also in this group. Following the same logic, it is possible that Malta also was subsequently absorbed by the Ostrogoths who took control of Sicily around 478. It should be emphasized, however, that there is no direct evidence for Vandal or Ostrogoth control of Malta.

Taking advantage of a general decline among the Germanic Kingdoms, the Emperor Justinian I (527-565) undertook to restore the western Mediterranean to the Empire. Realizing that control of the seas would be the key to success, he began by dispatching an armada against the Vandal naval kingdom in 533. The Vandal fleet, still to be avoided at all costs, had been decoyed to Sardinia where Justinian had fomented a revolt. The Byzantine forces were able to capture Carthage without opposition from the sea, and the Vandal kingdom collapsed.⁷

The Maltese Islands are likely to have passed into the jurisdiction of the Byzantine Empire in this period, possibly around 535, when Belisarius, the general of Emperor Justinian, conquered Sicily. The first unequivocal datable reference to medieval Malta is supplied by Procopius, the Greek historian who wrote an account of the wars the Byzantines fought during the reign of Justinian. In the section that describes the events of the year 533, Procopius reports

that Belisarius' fleet had departed from a location called Caucana (identified as the Porto Lombardo on the island of Lipari) and 'touched at' the Maltese Islands on its way to Africa.⁸ The Greek verb used implies a very short anchoring time, or maybe even simply sailing close to the islands but not landing. However, it is certain that Malta was not Byzantine at that time since Belisarius had to get permission from the Goths to launch this attack from a base in Sicily. If Malta was Byzantine it could have been used as a staging base for the expedition and there would have been no need for such an intricate strategic and political dealings to allow Byzantine access to Sicily.

Byzantium moved against the Ostrogoths, and by 540 most of Italy including the Ostrogothic capital at Ravenna was in Byzantine hands. Brown believes that Malta was Byzantine territory by 544, based on an indirect reference to the island, once again by Procopius. In this section Procopius mentions that the Libyans who survived the Berber invasions fled to 'Sicily and the other islands.'⁹ Brown believes that Malta is among the 'other islands' and that this passage proves that the Maltese Islands were conquered some time between 535 and 544.¹⁰ Because the Maltese Islands had increasing contact with the Greek settlements of Sicily since the fifth century B.C., the traits of Greek culture were already commonplace on the island.¹¹ Therefore, the transition of the island to Byzantine rule occasioned almost no major cultural changes that can be detected in the present day material remains.¹²

Procopius also mentions the name of the island in a familiar shipwreck story. Artabanus, the commander of the armies in Sicily who was crossing the Ionian Sea from Cephalonia to Sicily, was caught in a storm off Calabria. Having lost his mast during the storm, Artabanus could do nothing but to let his ship drift to Malta.¹³

The fighting between the Ostrogothic kingdom and Byzantium continued until the definitive victory of the latter in 551. Also around this time, another Byzantine fleet took control of the Mediterranean coast of Vizigothic Spain, and the Balearics. The Mediterranean once again became a Roman lake, kept secure by efficient Byzantine naval dominance.¹⁴

In this new world order, the Maltese Islands were included in the patrimony of the Roman church and were possibly incorporated into the secular administration of Sicily.¹⁵ However, this system might have been imposed on Malta at a later date, as there seems to be no evidence for the existence of a bishopric in Malta before 553.¹⁶ The first unequivocal references to a bishop in Malta are recorded in the register of the letters of Pope Gregory the Great (590-604).¹⁷ Unfortunately, these documents provide very little information other than the fact that Malta now had a bishop.

Regardless of how the Maltese Islands were incorporated into the Byzantine system, it is clear that they were in the Byzantine domain. The Byzantine fleet emerged as the dominant naval power in the Mediterranean during the period following the victories against the Vandals in North Africa and Ostrogoths in Italy.¹⁸ The Vandal fleet had utterly disappeared and the Ostrogoths had completely abandoned their naval claims. Ahrweiler states that the Mediterranean was not a border of the Byzantine Empire, but was the core of it, by providing cohesion and unity for the lands that bordered the sea via the sea-lanes stretching from the Caucasus to beyond the pillars of Hercules and from Crimea to the Red Sea. Therefore, providing safety on the sea not only for commercial shipping but also for communication was of crucial importance to the Empire.¹⁹ Safety at sea led to a flourishing maritime trade, and increased shipping. In turn, piracy became more appealing to many as a vocation. The period between the sixth and the eleventh centuries is characterized by a rise in piracy that was increasingly directed against coastal settlements, especially after the emergence of the Muslim

state in the seventh century.²⁰ Piracy against coastal settlements generally indicates diminished maritime activity and the absence of commercial vessels with rich cargoes plying the regular trade routes.²¹ The transformation of the Byzantine fleet, and its incorporation to the *theme* system created in 582 by Emperor Maurice, was the first Byzantine reaction to these developments.²² The army was also divided into smaller units; the Byzantine Emperor had his own garrison troops, *tagmata*, at Constantinople and a series of provincial armies stationed in political regions called the *themata*. The *themat* system involved the introduction of a decentralized government and the creation of provinces with their own, independent *themat* fleets. Under this system the expense of maintaining a navy fell directly on the same areas of the Empire that required naval protection. The imperial fleet was kept in Constantinople and smaller *themat* fleets were assigned to patrol their own areas (*themes*). The system proved to be very effective in providing safety at sea, at least to some extent, until the appearance of the Arabs on the eastern and southeastern coasts of the Mediterranean, shortly followed by the emergence of their fleet as the major rival to Byzantine forces in the Mediterranean.²³ In the 600s, Persian and Arab invasions devastated much of Byzantium's eastern territories. Especially after the capture of Egypt and its port Alexandria by the Arabs in 641, and the establishment of other bases on the Syrian coast, the Arabs became a powerful naval enemy. In addition, the loss of major commercial centers like Alexandria and Antioch, which were the second and the third largest cities of the Roman Empire and major elements of commercial system, disrupted the commercial interactions and shipping throughout the Mediterranean.

Byzantine ceramics dating to the sixth and the seventh centuries found in Mdina and Tas-Silg in Malta and in Cittadella in Gozo indicate that Malta was also frequented by eastern merchants and ships during the period of relative peace following the establishment of Justinian's system.²⁴ Based on the Byzantine ceramics found in the area near Marsa, it is likely

that this inlet continued to serve as the main port for the islands.²⁵ The dating of scattered ceramic fragments excavated at the shore of the Marsascala Bay by a Franco-Maltese team in 1993 indicate that this location may have been used as an anchorage from the second century B.C. until the seventh century A.D.²⁶ The greatest concentration of dated material clusters around the fifth and the sixth centuries and this possibly points to the fact that more ships anchored here during the Roman and Byzantine periods.²⁷ However, the archaeological material is very difficult to interpret in this case, as no information is available about whether or not there was a terrestrial settlement around the Marsascala Bay. In addition to the shrinking population and limited settlement in urban areas, it also seems that the occupants of these settlements in the center of the island felt insecure and built fortifications. It is difficult to tell who or what caused these defensive measures, but raiding pirates or the Arabs are the likely candidates.

In all, the archipelago did not seem to have any importance for the Empire during this period. Its isolated location justified its only known function: a place of exile.²⁸ A reference to the Maltese Islands comes from Patriarch Nicephorus' account of the events of 637. In this year, Emperor Heraclius exiled his brother's son Theodorus, who was accused of conspiracy, to the Maltese Islands after having his nose and hands cut off.²⁹ Theodorus was accompanied with a letter to the *dux*, the local military commander on the island, who ordered one of his legs to be amputated upon his arrival. The Byzantine chronicler Theophanes' account, dated 790, also confirms the function of the island as a place of exile. Emperor Constantine VI sent the leaders of the revolt of the Armenaikon theme to Sicily and "the other islands" for exile.³⁰

Apart from the information in 'Theodorus' letter' that suggested that a *dux* was in charge of Malta, there is even less secure evidence that the islands might have been home to other important military personnel. A seal that supposedly dates to the eighth or the ninth century bears the name of Niketas *droungarios* and *archon* of Malta.³¹ The seal was published in 1900

by Schlumberger and apparently belonged to Marquis d'Anselme de Puisaye, who had purchased it in Tunis, and subsequently lost it. Brown's unsuccessful search for the seal is described in detail in his 1975 article, as well as his doubts about the date assigned to the artifact.³² Nevertheless, the seal appears to point to the existence of a high-ranking naval officer in Malta, presumably with a small fleet.³³ Based on an evaluation of the organization of the Byzantine navy, the title *droungarios* used here would imply that Niketas was in charge of a sizeable naval squadron and may have been directly responsible to the emperor.³⁴ The fact that he also was the *archon* means that he was entrusted with the administration of the island.³⁵ However, Brown believes that this situation might also be interpreted as Niketas being the commander of a *droungos* (a unit of 1,000-3,000 men), who had taken over the functions of the civil governor of the town.³⁶ In all, the scant literary and archaeological evidence from Malta is not enough to suggest that the islands were a naval center of major importance.³⁷ It should also be noted that during this period the Byzantine navy was weakening its grip, especially over the western Mediterranean, as the central government was very much involved with religious and political crises in the capital.

Constantinople was under an Arab siege between 716-718. Once the Arabs were forced to lift their siege due the able command of the new Byzantine Emperor Leo III, another equally-devastating time known as the Iconoclastic Period (717-843) had begun. Initially, the destruction of holy icons provoked a popular revolt and in one instance, an unruly mob killed an officer who had removed statuary from an altar. That first inflammatory incident was followed by the revolt of the troops of the *Theme* of Hellas. It also became evident that the European provinces were opposed to the new religious policies. Leo's attempts to win over the Patriarch and the Pope also failed and shortly thereafter, in 787, Charlemagne conquered most of Italy, put an end to the Lombard Kingdom and was proclaimed Holy Roman Emperor in 800.

At the end of the eighth century, widespread economic development took place in the eastern Muslim provinces that began to revitalize the markets of the eastern Mediterranean. New caravan routes opened between Egypt and the Atlantic coast of Africa, which avoided Byzantine-controlled waters in the Middle Sea.³⁸ In short, during these years (mid sixth to late eighth century) the Byzantines were never able to use their control of the central Mediterranean to completely dominate the maritime activity of their Islamic or Western neighbors.³⁹

The Arab conquest of Crete in 825-826 required the Byzantine Empire to re-evaluate the organization of their navy. Crete was of crucial importance to maintain connections with the western territories (i.e., Italy and Sicily).⁴⁰ As mentioned above, the *theme* system, established in the late sixth or early seventh centuries, was basically a defensive organization based on small and localized fleets, dedicated to protecting specific areas against pirates and to maintain the sea border with the Islamic Caliphate.⁴¹ Crete was not recovered until 961, but a re-organization of the Byzantine fleet from a defensive force into an offensive weapon was realized. The *theme* system was abandoned, and a number of imperial fleets were established with the goal of re-asserting Byzantine power in the Mediterranean and recovering all “Roman domains.”⁴²

The ninth and the tenth centuries were characterized by steady Islamic expansion, and Muslim sea power mustered sufficient strength to take control of most of the islands of the Mediterranean: the Balearics, Sicily, Sardinia, and Corsica in the West, and Cyprus in the East were all conquered. This ‘sea change’ was a return to the situation that had existed during the reigns of Justinian and his successors, when ships from Syria and Egypt could freely move through the waters of the Middle Sea to the West and vice versa.⁴³

The only two early medieval sites on Malta known to have been occupied until the Muslim period are the Byzantine basilica at Tas-Silg and the dwelling that replaced the Roman

villa at San Pawl Milqi. In addition, the remains of a villa in Rabat, Gozo are similar to those of San Pawl Milqi. The archaeological evidence from these sites indicates that the standard of living declined gradually until the ninth century.⁴⁴

The Maltese Islands were captured by a Muslim force originating from North Africa in 870, which will be discussed in detail in the next chapter. There are no Byzantine accounts of this event, but a tenth century Byzantine document mentions the crown's claims to the island of Sicily, and its 22 cities, after the island was completely lost to Muslims. Pertusi mentions that eight of these cities were on the islands of Malta and Gozo and they are mentioned among the Sicilian cities in this instance because of their political connection to the Sicilian *theme*.⁴⁵

CHAPTER VII

MIDDLE AGES: PERIOD OF MUSLIM OCCUPATION

Historical texts, archaeological sites, and ethnographic evidence clearly point to a period between the late ninth and late thirteenth centuries, during which the Maltese Islands were under the Muslim sphere of political and cultural influence. Then, between the thirteenth and sixteenth centuries, the Maltese population transformed from predominantly Muslim beliefs into devout Roman Catholicism. Between 1530 and 1789, the Maltese Islands were the home of the Order of Saint John, a major institutional force in the military strategy to protect Christian Europe from Islamic expansionism. Consequently, the religious identity of Malta as a Catholic nation occupies a very important place in Maltese culture and in the mind of the present day Maltese population.

The modern political and ideological direction of Malta is concentrated towards an economic and cultural integration into Europe. Therefore, African and Muslim contributions to Maltese heritage not only conflict with everything Malta 'wants to be', but also are generally treated as a dark spot in the history of the island that the modern Maltese population is willing to ignore.¹ Predecessors of this tendency can be found in the seventeenth century texts that constitute the foundations of Maltese history. Modern scholars are generally aware of the existence of such inconsistencies and incorrect information in earlier histories of Malta, but these misconceptions are deeply imbedded in the literature, and repetitions of some mistakes can still be seen in various recent publications. The physical characteristics of the modern Maltese population (looking much like the inhabitants of North Africa) and the Maltese language (a

Semitic one that originated from a North African dialect of Arabic) are reminders of the Muslim periods and subsequent interactions with Muslim North Africa.

The current interpretation of medieval Maltese history is largely based on the information presented in a text titled *Descrittione di Malta*, published in 1647.² The author of the *Descrittione*, a Maltese scholar named Gian Francesco Abela, was a patrician cleric who eventually became the Order's vice-chancellor.³ Modern historians tend to regard Abela as a reliable source, but a close examination of his work reveals that the history presented there is based on unreliable materials such as local stories, popular folklore, and legends. Furthermore, it appears Abela consciously misinterpreted and distorted his sources to portray Malta as innately European and Christian, de-emphasizing its historic links with Africa and Islam.⁴ Abela's history was reprinted in Latin in 1723 in the fifteenth volume of Johannes Graevius' *Thesaurus Antiquitatum et Historiarum Siciliae*, and it was re-edited in 1772 by Giovanni Ciantar and published in Italian in four volumes as *Malta Illustrata*.⁵ In an eighteenth century effort to strengthen the case for Abela's distortions, a Maltese priest named Abate Vella generated forged Arabic documents.⁶ Even though these manuscripts are interesting to read, since they clearly illustrate how historiographic scholarship may be influenced by ideology and politics, it is apparent that there are no reliable texts of European or Maltese origin that provide information about the period between the ninth and thirteenth centuries.

Unfortunately, contemporary Arabic sources that include information regarding the Arab period of Malta are very limited.⁷ In most cases, Muslim geographers only provide basic information about the geographical position of Malta; but there are distinct discrepancies in some of these descriptions (i.e., Qazwini mentions that Malta is close to the Iberian Peninsula).⁸ Figure 20 shows an Arabic map from this period that mistakenly locates the island in the Aegean Sea. 'Ad Dimasqi – mistakenly – mentions that Malta is 60 miles long (about 96 kilometers) and

30 miles (48 kilometers) wide, and has one city on it, called Malta,⁹ and Al-‘Umari, states that Malta is close to Tripoli, has a protected harbor on the east side of the island, and is abundant in sheep, honey and fruit.¹⁰ The exaggerated dimensions of the island is often reflected on Arabic maps from this period (Fig. 20).

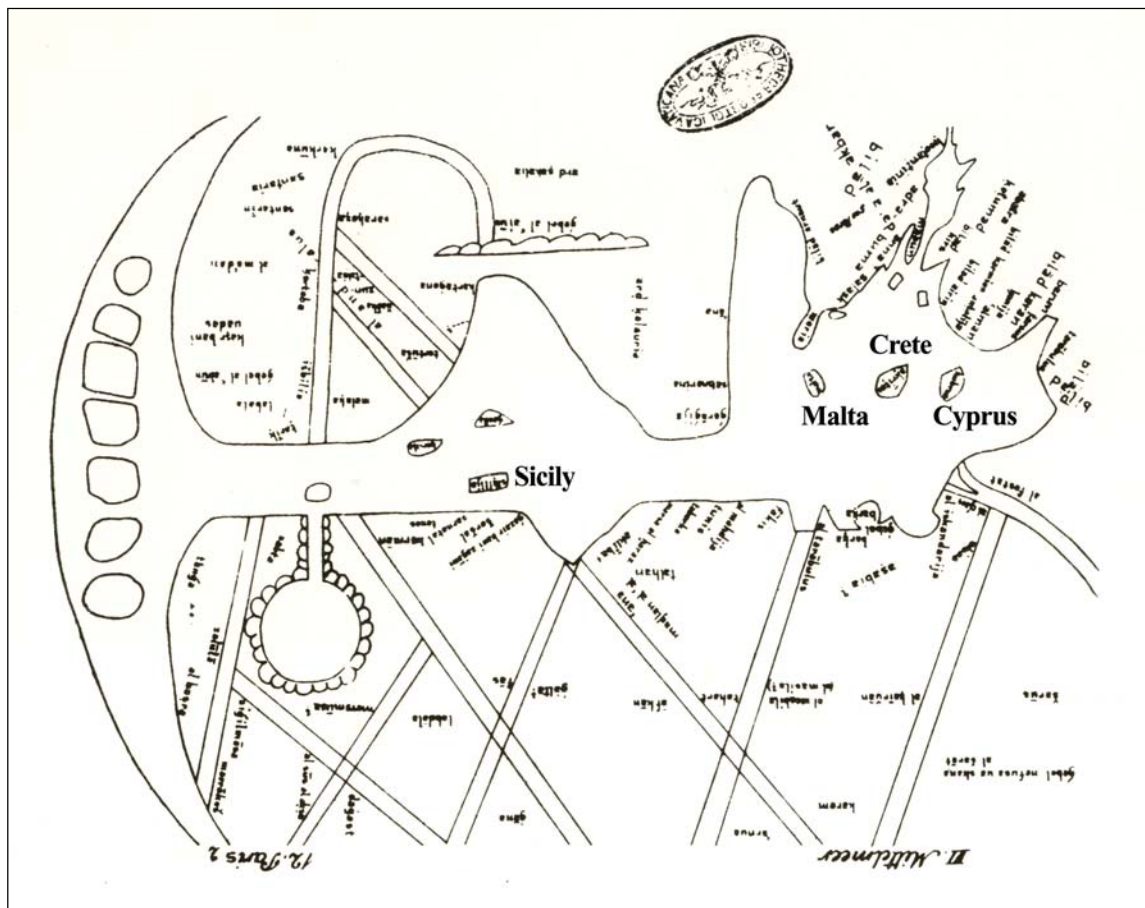


Fig. 20. Map created by Ibn Hawqal placing Malta to the east of Peloponnesian peninsula. (After: Margherita Pinna, *Il Mediterraneo e la Sardegna nella cartografia Musulmana*, p. 88, no. 37)

Maltese Islands lack archaeological material from the medieval era. Funerary inscriptions found in archaeological contexts provide only the names of the deceased, dates and Quranic quotations (Fig. 21).¹¹ Treasure hunting and looting of archaeological sites has been a serious problem in Malta since the fifteenth century.¹² In addition to the ancient looting, it is

probable that medieval structures and artifacts were damaged or destroyed during the construction of the modern towns that lie on top of the ancient settlements of medieval Malta. Most buildings on the islands were completed in the post-medieval period, and construction work in Malta is still unsupervised.



Fig. 21. Funerary inscription known as the 'Maimuna stone' discovered in Gozo (the artifact dates approximately to the twelfth century). (Photograph: author).

Another problem related to the archaeology of medieval Malta is the absence of publications. It is known that a number of Muslim tombs near Mdina were excavated in 1881 and between 1920 and 1925; but they were not published.¹³ The major exceptions to the general absence of medieval archaeological records are the excavations at Tas-Silg and San Pawl Milqi. Final reports have yet to be published, but preliminary accounts make it clear that archaeological excavations can produce valuable information about the medieval history of Malta. Similarly, archaeological materials dating to the medieval period that were recovered from the underwater excavations near the Quarantine Hospital (see Appendix D), may help to reveal the use of this harbor before the arrival of the Knights.¹⁴ These preliminary finds point to a comparatively flourishing Byzantine period, a Muslim conquest followed by Muslim occupation, and a subsequent period of Latin reconstruction.¹⁵

The last problem affecting the archaeological record of Malta lies in its geological formation: the limestone surface of the island is covered with a very thin soil disturbed by generations of Maltese farmers. Archaeological remains have been damaged or completely destroyed by intensive land use or erosion, by carting, quarrying, terracing, fertilizers, and dumping of inorganic town refuse.

The Mediterranean Region in the Medieval Era

The economic and political dynamics of the period of Muslim expansion into North Africa have been widely discussed by scholars. The book titled *Mohammed and Charlemagne*, written in 1927 by the Belgian historian Henri Pirenne, included the first and most extensively debated thesis on this issue. According to Pirenne's thesis, commercial relations between the Mediterranean East and West were interrupted by the Arab conquests of the seventh century. As a reaction to this interruption, Europe reorganized its political and economic structures around

agriculture and upon a north-west axis, leading to a progressive decline of Mediterranean commercial hegemony.

Other scholars have not agreed with Pirenne, claiming that there is enough historical and archaeological evidence to suggest other scenarios. Historians such as Sabbe and Lombard pointed out the evidence that confirmed not only the continuation of relations between the East and West, but also suggested that the Arab conquests indeed amplified international commerce. Cahen provides an overview of this scholarly debate and historical interpretations of Medieval Mediterranean history in his 1980 article.¹⁶ According to Cahen, it was not the Muslim expansion, but the politics of economic war adopted by the Byzantine Empire against the Arabs that was responsible for the creation of new economic and political boundaries in the Mediterranean of the late eighth century.¹⁷ Cahen believes that with its dominance of the Eastern Mediterranean, the Byzantine fleet could intercept merchant ships or oblige these ships to bring their cargoes into ports under Byzantine control. The Muslim reaction was to do the same when they could, especially in areas close to the coast under their control. Under these conditions, the Mediterranean ended up being divided into two sectors separated by a horizontal line extending approximately from Rhodes to Sicily. Cahen's argument suggests that the trade of these two sectors was organized differently because of the specific geographic conditions, and, that in both sectors, maritime trade was avoided whenever possible since the land routes are easier to control and protect. Lewis also views the situation of this period as one of "two quite distinct major maritime complexes: a Black Sea-Aegean one centering in Constantinople and an Islamic one stretching from Spain and the Maghreb east via Sicily to Syria and Egypt."¹⁸ Lewis also provides a brief analysis of each complex. The Byzantine complex was self-contained, and possessed all the raw materials required to maintain a high level of economic life (i.e., food, timber, salt, metals). On the other hand, the Islamic complex depended upon both interregional

trade and international commerce reaching it from the Indian Ocean and Sudan. In turn, the east depended on the timber, iron and slaves procured from the west.¹⁹ Therefore, Muslim Mediterranean was relatively richer and more expansive in its economy. A consequence of this fragmentation was the development of piracy of each zone upon the other.²⁰

The Arab occupation of Crete, Sicily and Calabria roughly between the ninth and eleventh centuries, of Sardinia and Corsica until the eleventh century, the Balearic islands until the thirteenth century, and other lands and islands of minor importance for varied lengths of time led to the creation of a fairly large pocket of Muslim control in the central and western Mediterranean. Relatively safe trade could be conducted in this area, and “eastern” products came into Europe through these re-established commercial connections between Europe and North Africa. The merchants of Amalfi were the first Christians to infiltrate this network in the ninth century, shortly followed by Naples and Venice.²¹ According to Cahen, the role the Amalfitan merchants played in the establishment of trade connections was due to the lack of ship timber in North Africa. The timber required for naval construction in the expanding Fatimid state was supplied by the Italian city-states, led by Amalfi, in return for Egyptian alum.

Soon after the establishment of a regular and continuous commercial link between the Fatimids and the Italian city-states, North African connections lost their importance once again, as trade shifted to the major centers, such as Amalfi and Cairo. The Bedouin invasions into North Africa accentuated this shift. The reaction of the North African centers to this development was to turn to piracy, and to prey upon the wealth by-passing their ports. Although the North African pirates do not seem to have become strong enough to present a threat to the trade of the central Mediterranean, they certainly prompted the Italian city-states to organize a patrol system, which eventually led to their control of the western Mediterranean basin.²² North

Africa re-acquired its economic importance when the gold of Sudan and the coins minted in North Africa started to appear in European contexts in this period.²³

The conditions that developed in other parts of the Mediterranean directly affected the logistical importance (or insignificance) of the Maltese Islands in the early medieval period. The general decline in economic relations between East and West decreased frequency of sea traffic, and the re-establishment of the boundaries of the Christian and Muslim cultural and economic spheres of influence around an East-West axis, rather than the North-South boundary (from Sicily to Tunis), led to a decline of Malta's logistic importance in the ninth century.

Who Conquered Malta?

The Muslim conquerors of Malta in the ninth century were the Aghlabids of North African origin, who embarked from their African bases and from Sicily, which was also an Aghlabid territory in this period. It is necessary to briefly introduce these North African peoples in order to understand their political and military motives and their cultural impact on Malta.

The Arab conquest of North Africa was not part of a preconceived plan of expansion or an organized effort of the Islamic caliphate, but was initiated by Arab military chiefs in Egypt to gain military prestige and booty. Amr bin al-As, the general of the Muslim army that conquered Egypt, began the western expansion of the Islamic State after the surrender of Alexandria in 642. He led a campaign to Cyrenaica in 642 or 643 and conquered Tripoli in 645.²⁴ The new territories were administratively attached to the province (*wilaya*) of Egypt and the area was named *Maghrib*, meaning 'the West'.

The Muslims started to challenge Byzantine supremacy at sea during Constans II's reign (641–68) by capturing Cyprus after their invasions of Armenia and Asia Minor. These invasions

threatened Sicily and Constantinople, leading to Constans' campaigns in the Balkans, and his eventual establishment of a fortified base in Syracuse (663), to provide additional resistance to Muslim expansion in this area.²⁵ The archaeological discovery of eighth-century Byzantine seals in Malta and Gozo suggest the presence of certain Byzantine naval officers on the islands in this period.²⁶ However, this Byzantine naval reorganization could not prevent a Muslim raid on Sicily in 667, but helped to reduce Muslim activity in this region to mere raids and temporary conquests.²⁷

On the other hand, the North African Muslim forces under the leadership of Ukba bin Nafi met their greatest challenge in Carthage.²⁸ Unable to take Carthage from the Byzantines, Ukba bin Nafi founded the city of Kairwan as a military base some 90 miles to its south.²⁹ Carthage ultimately fell in 693, and Malta and Sicily were most impacted by these developments and received numerous Byzantine and Berber refugees fleeing northward.³⁰ Ukba's forces reached the shores of the Atlantic Ocean in 710, and gained their first foothold on the mainland of Europe in 711, but the only Muslim occupation in the central Mediterranean thus far was the island of Pantelleria, occupied since 700.³¹

The Aghlabid State was established in the second half of the eighth century. The major reason for its detachment from the Islamic State lay in the disputes between the Arabs of the *wilaya* of Ifriqiya and the government of the caliphs regarding the autonomy of the *amir*.³² Ibrahim bin al-Aghlab was the governor of Sab and was from the Muhallab family.³³ His power increased considerably after he suppressed a rebellion that took over the capital city of Kairwan in 797. Once the city was freed it was under strict control of al-Aghlab's army.³⁴ The unpopular *wali* of Ifriqiya, Ibn Muqatil, fled the city before it was sacked by the rebels. With popular support, al-Aghlab refused to hand the power back to Ibn Muqatil upon his return to Kairwan to resume his functions. In February 800 he formally usurped Ibn Muqatil's position and requested

Caliph Harun al-Rashid to grant him Ifriqiya as a hereditary fief.³⁵ Ibrahim al-Aghlab's request was approved, and his descendents ruled Ifriqiya in the name of the Abbasids until 909, preserving their political autonomy and minting their own coins.³⁶

Initially, the Aghlabid state comprised the area to which the *wilaya* of Ifriqiya had been reduced after 761: Tunisia, eastern Algeria, and Tripolitania.³⁷ In 827, the *amir*, Ziyadat Allah I (Ziyadat Allah Mohammed ibn Ibrahim), began the conquest of Sicily, which the Muslims had raided several times before the Aghlabid period.³⁸ The same information is provided by Ibn Khaldun who mentions that Ziyadat Allah equipped a fleet under the command of the governor of Sicily, Ibrahim ibn Abd Allah ibn al-Aghlab, to attack Pantelleria and "the islands" in 836.³⁹ Therefore, there is little doubt that the first Muslim raids on Malta began in 835/836.⁴⁰ Command of the expeditionary force was entrusted to *qadi* Asad bin al-Furat. Ibn al-Athir's accounts suggest that Malta and Gozo were also attacked during the descent upon Sicily in 835/836 by Ziyadat Allah's fleet.⁴¹

By diverting the energies of the *jund* towards military conquest outside the Maghrib, and by the political skill they employed in dealing with the religious leadership, the Aghlabids avoided internal upheavals. Stability led to economic expansion. The production of cereals, olives, dates, and animal products increased and contributed to the expansion of both external and internal trade. Kairwan became an important center of a trade network reaching western and southern Africa and the rest of the Islamic State in the East. During the Aghlabid period the accumulation of gold in Ifriqiya rose to a great extent due to its trade relations with Sudan, which also provided large numbers of slaves. Prosperity resulting from agriculture and trade contributed to the development of crafts, such as weaving, jewelry making, leather and woodworking. The urban population consequently expanded and an economic elite consisting predominantly of traders and landowners developed in the cities.⁴²

The Conquest of Malta in Historical Sources

The rise of Islam and the consequent shifts in the balance of Mediterranean power started to affect Malta long before the definitive conquest of the island. Muslims started raiding Sicily as early as 700 and established a naval base in Tunis, enclosing the islands of the central Mediterranean and increasingly controlling the sea routes in this area. The conquest of Sicily gained augmented importance during the reign of the Aghlabid Dynasty. The Muslims captured Palermo in 831, and during the next ten years strengthened their hold on the Val di Mazara region, where the first Islamic colonies were founded. From 860 onwards they undertook the final phase of Sicily's conquest and at last occupied Val Demone (Taormina) in 902.⁴³ As mentioned above, an account by Ibn al-Athir may be interpreted as an evidence for Arab attacks on Malta and Gozo in this period.⁴⁴

Goodwin and Brown believe the relatively late conquest of Malta may be attributed to the increased importance accorded to the island by the Byzantines, who provided Malta with good defenses.⁴⁵ However, it may also be suggested that Malta was less of a concern to the Muslims because of the absence of defenses, resources and any other economic or military importance. The fact that there is no record of earlier attacks supports the latter argument.

According to historical texts, the definitive Muslim conquest of Malta took place in 869 or 870, when the Aghlabids attacked both Malta and Gozo. Their naval expedition embarked from the main bases in Ifriqiya (Tunis, Sousse, Sidi Daoud or Kelibia) and also included reinforcements from Sicily.⁴⁶ The Aghlabid fleet that took Malta was probably under the command of an Aghlabid prince named Ahmed ibn Omar ibn Ubayd (or Obeid) Allah ibn al-Aghlab.⁴⁷ Based on an evaluation of the available historic documents, it seems likely that this first Muslim effort, which failed to capture the main fortified settlement, was shortly followed by

the arrival of a Byzantine relief force, which made it possible to resist the invasion for a few months.⁴⁸ Michele Amari,⁴⁹ Louis de Boisgelin⁵⁰ and Salvatore Candido⁵¹ (whose information is based on a compilation of Amari's earlier work) date the definitive conquest to 29 August, 869 based on information provided by the Islamic historian Ibn Khaldun.⁵² Another anonymous medieval manuscript preserved in Cambridge also gives this precise date for the conquest of Malta.⁵³

Yet, another historical source on the conquest, presented by Kendal, is a Byzantine document that mentions that the bishopric prior of Malta was unable to return to his see after the Council of Chalcedon in 868 because the island was being invaded by the Arabs.⁵⁴ No bishop of Malta is known between 868 and 1156.

On the other hand, other scholars mention a variety of dates by. In his *Descrittione di Malta* Abela mentions that Malta was definitively conquered by the Muslim governor of Sicily in 828.⁵⁵ Ettore Rossi reported that Malta was conquered during the same year as the Muslim conquest of Mazara in Sicily, in 824.⁵⁶ An-Nuwayri mentions that the Island of Malta was conquered between 864 and 875 during the reign of Abd-Allah ibn al-Aghlab, known as Abu al-Garaniq.⁵⁷ In addition, according to Ibn al-Athir, there was a Byzantine attempt to re-conquer the island in 870, but the Muslims held out and the Byzantine effort was unsuccessful.⁵⁸ This piece of information would indicate that Malta was already under Muslim control in 870.⁵⁹

Al-Himyari provides the most detailed description of the conquest of Malta:

It was attacked by Halaf al-Hadim, the master of Ziyadat Allah Ibn Ibrahim ... with the help of Ahmad Ibn Umar Ibn Abd Allah Ibn al-Aghlab – and it is he who suffered for it ... He besieged it and died during the siege. And they wrote to Abu Abd Allah about his death, and Abu Abd Allah wrote to his governor in the island of Sicily, Muhammad Ibn Muhammad, and they captured the fortress of Malta and took its ruler Amros prisoner, and they demolished the fortress, and they looted, and desecrated whatever they could not carry.⁶⁰

The situation after 870 is also ambiguous. Both the archaeological record and al-Himyari's account suggest that there was considerable opposition to the Muslim attack of 870.

Al Himyari describes the events after the conquest as follows:

... and he took to Ahmad from the churches of Malta that with which he built his castle in Susa by the sea...after that the Island of Malta remained an uninhabited ruin, but it was visited by shipbuilders, because the wood on it is of the strongest kind, by the fishermen, because of the abundance and tastiness of the fish around its shores, and by those who collect honey, because that is the most common thing there.⁶¹

Al Himyari's accounts about the depopulation of the island do not seem reliable, as there is no other historical or archaeological evidence pointing to a period of complete abandonment of the island.⁶² On the other hand, the archaeological record hints that the capture of the Island of Malta (although not necessarily Gozo) was destructive.⁶³

Malta under 'Arab' Rule

The period examined here is generally referred to as the 'Arab' period of Malta. However, not all of the Muslims who settled in various parts of the Mediterranean were Arabs. In reality, they were composed of many African ethnic groups as well as of populations from Asia.⁶⁴ For example, Sicily under the Aghlabids was inhabited by a mixture of many different peoples, races and religious persuasions such as Christian and Muslim Sicilians, Greeks, Lombards, Jews, Arabs, Berbers, and even some Persians and *Negroes*.⁶⁵ The Muslims who settled in Malta were also ethnically heterogeneous. Numerous Muslims moved into the islands from Ifriqiya, although others came from Muslim Sicily, and perhaps from Andalusia, Egypt, Syria, the African interior, and other places.⁶⁶ People of Berber heritage probably constituted the majority of new settlers of Malta rather than people who could trace their ancestry directly to Arabia.⁶⁷

The major cultural contribution of the 'Arab period' to Maltese heritage was the Maltese language, which is probably very close to the one then spoken in Tunisia. The extent of the Arabization of Malta is shown by the thoroughly Arabic character of the local place-names, since there are few place-names that predate the Arab era on the archipelago.⁶⁸ The majority of the place-names are of Arabic origin, with the exception of the names of 'Malta' and 'Gozo', which are derived from Latin roots.⁶⁹

In addition to the language, the Arabs brought a variety of new crops into the western Mediterranean region. Although it is impossible to precisely date the introduction of different crops into Maltese agriculture, it is possible that crops such as citrus fruits and cotton were introduced at this time by Arabs who also brought know-how about the agriculture of such plants as well as techniques of processing the product. This thesis is also supported by linguistic studies. Arabic contributed most of the vocabulary concerning irrigation works and irrigation farming, not only to the Maltese language but also to the Spanish and Italian languages. It is possible that the Arabs, coming from generally drier climates, were more skilled in the use of scarce water supplies for agricultural purposes.⁷⁰ They also introduced an animal-powered device for lifting water from wells onto land.⁷¹

Based on the archaeological evidence, it is possible that Malta was visited by ships sailing between Sicily and Maghreb. Most of the imported ceramics (and glass) from this period are of Sicilian or Tunisian origin and were found in either Mdina and, to a lesser extent, in Cittadella (Gozo) and other minor towns.⁷² However, the fact that the name of Malta was not mentioned at all in the Geniza documents that otherwise provide an impressive account of the commercial contacts of Tunisia and Sicily is significant.⁷³ This absence might help to establish that there were no direct commercial contacts but ships sometimes used the Maltese harbors as shelters in case of a storm or as a supply point.

In 991, a census of the Maltese Islands officially counted 14,972 Muslims and 6,339 Christians.⁷⁴ During its Muslim occupation, Malta was governed by a *kaid* and a group of leading Muslim citizens. The Muslims re-fortified the old Roman capital, renamed it Mdina (or in Arabic Medina), and added coastal fortifications on the peninsula of Birgu. The major Muslim settlement on the island was at Mdina, with its cemetery just outside the town.

Accounts in Arab sources provide very scanty and controversial information about Malta in this period. One chronicler (al-Qazwini) described as “Malitah is an island located close to Andalusia ... rich in everything that is good and in the blessing of God... well peoples possessing towns and villages, trees and fruit.” Although it is possible that the Arabs may have viewed the islands more favorably as they came from more arid regions, it is also possible that al-Qazwini was talking about another island, as Malta barely fits the above description.⁷⁵ Another account from the twelfth century, by the Muslim geographer Idrisi, mentions that the archipelago lies about 100 miles (160 kilometers) to the east of Pantellaria, 80 miles (128 kilometers) south of Sicily and half-a-day distance to Crete.⁷⁶ He adds that the island of Gozo is small but has a protected port and that Malta is a large island that lies to the east of Gozo and has a protected harbor on its east. Idrisi also mentions that Malta “abounds in pasture, sheep, fruit, and above all honey.” He mentions that wood was shipped to Sicily from Malta. Idrisi’s account implies that most of Maltese land was used for grazing animals and thus left uncultivated. The type of agriculture hinted at in this sketchy description also implies a low population density.⁷⁷

The main significance of the Maltese Archipelago seems to have been its logistical position in the middle of a commercial network connecting Ifriqiya to the ports of Europe. Unfortunately for Malta’s inhabitants, for most of the period during which the islands were under Muslim control, developments in the area lessened the importance of the central

Mediterranean and the Maltese Islands. Italian city-states such as Genoa and Pisa became increasingly involved in the trans-Saharan trade and managed to break the Muslim grip on both Sardinia and Corsica, establishing their supremacy in the Tyrrhenian Sea. In 1034 Genoese and Pisan naval forces sacked Bône, one of the most important commercial centers of the Algerian coast and also seized the island of Pantelleria with assistance from the Byzantine navy. In 1087 the invasion of Malta's closest neighbor to the south, Mahdia, must have had especially devastating effects on the commercial goods flowing through Maltese harbors. To make things worse, Moizz bin Badis, the governor of Ifriqiya, accepted a fresh investiture from the Sunni caliph in 1046, which prompted his Shiite subjects to revolt. This was the beginning of a period of instability for the region which would last for decades, eventually leading to the invasions of Arab nomads (known as Berber or Bedouin invasions of Maghreb). These invasions had a massively destabilizing effect on Maghreb's political life and trade, both with Europe and sub-Saharan Africa. The destructions caused the trans-Saharan trade routes, which until this time ran to Ifriqiya, to shift much further to the West, eliminating the important trans-Saharan trade from the central Mediterranean prior to the Bedouin invasions.⁷⁸

Weakening of Malta's links with Ifriqiya, and the inability of the homeland in Ifriqiya to provide protection for the islands, prompted enemy attacks. According to al-Himyari, the 400 free Muslims on Malta were attacked in 1053/4 by the *Rum*, that is the Byzantines, under the command of George Maniaces.⁷⁹ Al-Himyari describes the events of this attack as follows:

...In the year 445 the Byzantines attacked it with many ships and in great numbers, and they besieged the Muslims in the city and the siege became unbearable... and the Muslims asked for clemency, and they refused it except for women and belongings. And the Muslims reckoned the number of combatants among themselves and they found them to be about 400; then they counted their slaves and found they were more numerous than themselves. And they summoned them and said to them "if you are loyal to us in our struggle against our enemy, and you go as far as we go, and end up where we do, you will be free men, we shall raise you to our level and we shall give you our daughters in marriage, and we shall make you partners in our riches; but if you hesitate and abandon us, your fate will be the same captivity and

bondage which will be ours, nay you will fare even worse because with us one may be redeemed by a dear friend or freed by his ally or saved by the support of his community. And the slaves, of their own accord, promised more than they [the Muslims] had thought they would, and they [the Muslims] found that they [the slaves] rushed against their enemy more promptly than themselves..... The Muslims took possession of their [Byzantines] ships and only one of these slipped away.⁸⁰

Arabic writer al-Qazwini also refers to this attack and the help provided to the Muslims of Malta by the slaves.⁸¹ Once again, the final outcome is unclear. The Muslim offer of “women, freedom and property” to the slaves in return for their help is controversial.⁸² First, it would be against the Muslim religion to offer Muslim women to non-Muslims, and second, it would have been more profitable for the slaves to let the Byzantines conquer the islands, and be freed as Christians, allowing them to return to their own land. From this passage it is understood that the slaves were Muslim, even if they were descendents of the pre-870 inhabitants. They fought the Byzantines to avoid becoming slaves to Christians instead of Muslims, which would have worsened their situation. Besides, the fact that the Muslims offered their daughters in marriage might suggest that the slaves were not Christian, since Islam prohibits Muslim women from marrying non-Muslims. The reality may have been an untidy and fluctuating jumble of poorly defined people operating within a very small context.⁸³

Norman Attacks

In 1091, however, resistance by the islands to the attacks of Norman Count Roger was very feeble, and Muslim Malta and Gozo entered a period of subjection to the Christian rulers of Sicily, which lasted until the Latin colonization of the islands and the expulsion or conversion of many Muslims in the thirteenth century.⁸⁴

Count Roger the Norman attacked the island in 1091⁸⁵ The chief source for that event is the chronicle of Roger's French chaplain and biographer Geoffroi Malaterra, who was either with Roger or received a first-hand account of events.⁸⁶ His chronicle included a passage describing how the Muslims' Christian captives, of whom a great number were held within the town, came with palm-leaves to greet the victorious count. The first information provided here is that by 1091 there *were* many Christian captives in Malta. Roger took them away, seriously overloading his ships. On reaching Sicily he freed the captives and offered to settle them in Sicily free of any servile exaction, but they preferred to return to their own 'fields and friends' and left for their various homelands, crossing the Straits of Messina.⁸⁷ Clearly, the freed captives were not indigenous to Malta and were not from Sicily, since they left for their homelands by crossing to mainland Italy. Besides, Malaterra mentions that they cheered in Greek when Roger first came to free them.⁸⁸ Therefore, it is likely that these captives were Latins, and quite possibly Italians, who must have been captured by pirates, been shipwrecked or imported as slaves.⁸⁹ If Geoffroi Malaterra was correct in reporting that Count Roger took away from Malta, all, or perhaps most, of the Christian captives then on the island, it would follow that Malta was more Muslim after 1091 than before.⁹⁰

In any case, the Norman advance southward to seize Sicily and Malta (ca.1090) had little to do with religion and much to do with an interest in re-establishing profitable political and

commercial links with Ifriqiya, which was once again beginning to attract trade from sub-Saharan Africa.⁹¹ In fact, it seems likely that Roger the Norman never intended to conquer Malta and that the attack of 1090 was a power demonstration intended to prevent the use of Malta as a Muslim base, reducing the Muslims of Malta to tributary status.⁹² It should also be emphasized that Muslims were not the only competitors of the Norman Kingdom since a strengthened Byzantine navy recovered Crete, Cyprus and Cilicia in the late tenth century, and the Pisans and the Genoese took control of Corsica and Sardinia from the Muslims between 1016 and 1050, and emerged as a renewed naval power.

Therefore, it appears that the Norman attack of 1090 did not interfere in a substantive way with the Muslim population. Although the Muslims had to pay tribute to Sicily after this date, their customs were largely unaltered. The Normans, moreover, did not restore the bishopric of Malta, as is erroneously stated in Abela's *Descrittione*.⁹³ Information provided in the *Descrittione* and later myths and legends also give credit to Count Roger for the construction of a cathedral and several coastal fortifications.⁹⁴ However, there is no historical and archaeological evidence to support these statements, and Abela's statements are considered to be false by many scholars. In fact, a large part of the Norman military retinue consisted of Muslims, and Count Roger consistently resisted ecclesiastical pressure to convert them to Christianity.⁹⁵ It seems that the Normans tolerated the existence of Muslims in the lands under their rule, and even allowed an *amir* to remain in power in Malta with the understanding that he would pay an annual tribute. The major reason for this Norman policy is due to the fact that the Normans came to Malta as rulers rather than colonizers and never resided in Malta in large numbers.

In summary, the Normans probably became popular in Malta precisely because they never attempted to settle the islands or change the status quo. Moreover, even though Malta

passed to the Normans only four years before the first Crusade, there was no attempt to convert the population to Christianity.⁹⁶ Count Roger encouraged Christian immigrants to settle in Sicily to control the rebellious Muslim population, but Malta had little land to attract immigrants. In addition, such immigration and the Christianization of the Maltese population were not especially encouraged as the Muslims of Malta did not present any problems.⁹⁷

After 1090 Malta disappears from the documents once again. Presumably, the island relapsed into the African sphere of influence during the troubles that followed Count Roger's death in 1011 and the consequent resurgence of Muslim power. Malta had to be re-conquered by Roger II in 1127, and this more definitive conquest must be understood in terms of the general revival of commerce in the twelfth century and of Latin expansion across the whole Mediterranean.⁹⁸

Navy personnel under Roger II (son of Count Roger) were predominantly Greek, but Muslims made up the backbone of his army. It was also to Muslims that he tended to entrust financial management, though Muslims, Normans, Byzantines, and Jews held important positions in his civil administration. People from throughout the Mediterranean basin, including Jews, Muslims, and Christians were involved in regular trade, communication and cultural exchange in the central Mediterranean basin in the early 1100s.

Information transmitted to Roger II by geographers like Idrisi, about the abundance of gold in Ghana, led Roger II to try expanding his kingdom into Africa.⁹⁹ Therefore, the growth of the Norman Kingdom to include Sicily, Reggio Calabria, Apulia, and Malta was part of a larger policy for a southern expansion in the direction of Ghana. Because Roger II was more motivated by lust for gold than by religion, he did not attempt to force Muslims in Sicily or in Malta to convert to Christianity. Given Roger's overall policy in the central Mediterranean, Malta's

strong ties to Africa and to Islam were a bridge, an asset. In addition to Roger's strong dislike of the Frankish rulers of Jerusalem, he chose to play no part in the Second Crusade, because of his religious tolerance and also because Muslims remained a majority in Sicily and Malta in 1145. Hence, even as a so-called Age of Crusades was unfolding in the eastern Mediterranean, it seemingly left the day-to-day lives of the Maltese unaffected.¹⁰⁰

The territory between Tripoli and Bône was completely under the control of Roger II by 1160, and Normans controlled the central Mediterranean region. The fact that the Maltese population was predominantly Muslim and Arabic speaking contributed to the increasing importance of the island as a strong cultural tie between the Norman territories of Southern Europe and Northern Africa, as well as a commercial staging point.¹⁰¹

The Ayubid Dynasty under Saladin replaced the Fatimid rule in 1169. Saladin not only confronted the Crusaders in a more effective way, but also embarked for a re-conquest of Maghrib to establish a firmer control over the trade between North Africa and Europe. It is significant that there were no Muslim attacks on Malta in this period, possibly because the island was still predominantly Muslim.¹⁰² According to the report by Burchard, the Bishop of Strasbourg, who passed through Malta in 1175, the island was "inhabited by the Saracens" at the time.¹⁰³

It was not until Fredrick II (1194-1250) started to reorganize his Sicilian Kingdom (ca. 1220) that western influences began to permeate Malta. We know that there were Christians in Malta in 1154, based on a court document that states that some Christians got into trouble when they killed a Muslim at that date.¹⁰⁴ In 1224 part of the rebellious population of the Christian town of Celano, in Abruzzi, were deported to Malta. It is possible that Muslims were pressured

to abandon the island or convert to Christianity. The fourteenth century historian Ibn Khaldun reports the events as follows:

The tyrant of Sicily besieged the Muslims in their fortress on the hill, surrounded them, forced them to come down from their castle and sent them beyond the straits, establishing them at Lucera, a populous part of the province. Then he passed to Malta and chased out the Muslims who lived there, sending them to keep company with their brethren.¹⁰⁵

However, an estimate of the population made around 1240 indicates that there were many Muslims in both Malta and Gozo. Population statistics derived from a report compiled by Giliberto Abate in 1240-1241 indicate that there were a total of 836 Muslim families, 250 Christian families, and 33 Jewish families living on the royal estates of the islands of Malta and Gozo.¹⁰⁶ The precision of the figures in this report suggests a genuine count, possibly for tax purposes. The high number of Muslim families points to the fact that this population was left intact, even though there had been Christian migrations to the islands. Luttrell makes a compelling argument in his 1975 and 1993 articles, suggesting that the low number of Christian families on the island of Malta is a mistake inadvertently caused by a careless clerk who copied the original.¹⁰⁷ Even if the number of Christian families was somehow higher, the number of Muslim families would still be high two centuries after the Christian capture of Malta.¹⁰⁸

A document dating to 1271 from the Malta archives make clear that the disputes concerning the disposal of the property that belonged to Muslims who were presumably expelled. However, as Wettinger pointed out, the decree of expulsion was not issued against an ethnic group, but was applied to a religious group, the Muslims.¹⁰⁹ Therefore, Muslims who rejected their religion and accepted a formal Christian baptism did not lose their property and stayed on the islands. Quintin, writing in 1536, describes the settlement near the harbor as “Apart from the city and some houses in the suburbs, one would take all the rest for African huts.”¹¹⁰ Based on this description and other contemporary descriptions and inventories of

Maltese houses, Wettinger thinks that the Moorish styles of architecture still predominated as late as the sixteenth century.¹¹¹

In summary, it is clear that Malta was of a limited strategic or commercial importance during the period between the ninth and thirteenth centuries due to military and commercial instability of the central Mediterranean region. Muslim geographers did not know the island's precise location, and there is no word about its government, its language or any other details regarding the population, trade or defense in Arabic sources.¹¹² It is interesting to note that the only events registered by the Arab chroniclers are the conquest and the loss of Malta. It seems that Malta was an obscure piece of land off the Sicilian coast that did not merit any particular attention.¹¹³

CHAPTER VIII

LATE MEDIEVAL PERIOD

The second phase of medieval Maltese history spans from the beginning of the Hohenstaufen period in 1220 to the arrival of the Order of Saint John in 1530, during which time the islands were integrated into the European realm.

This period of Malta has been the subject of several books, but a critical study devoted exclusively to the political and economic context of Malta before the arrival of the Order of Saint John has not yet been attempted.¹ There are four major published sources that include information about the late medieval history of Malta: (1) the very short summary by Blouet,² (2) the article that summarizes the “state of research” by Luttrell,³ (3) the book chapter by Wettinger focusing on the medieval history of the *Castrum Maris*, the only coastal settlement in medieval Malta,⁴ and (4) the information provided in the relevant chapters of the recent book by Goodwin.⁵ However, all four works are of a descriptive nature and represent only a chronological presentation of available information, and the approaches of the investigators do not vary significantly from one another. This results from the fact that all three articles are based on almost identical sources. The following description is a summary of “medieval Malta” presented by the above-mentioned authors. Malta has always accommodated a dense population, and feeding the inhabitants became more of a problem after the population of the archipelago doubled itself during the medieval period.⁶ Unable to produce the necessary natural resources and agricultural land, Malta became almost completely dependent on Sicily for food. This dependency, in turn, dictated that the rulers of Sicily controlled Malta. As a consequence, the history of Malta was almost identical to that of any Sicilian town.

However, this view does not always agree with the historical evidence and, in my opinion, an evaluation of Malta's role in the central Mediterranean trade network and warfare depends upon the answers to the following questions: What was the basic pattern of commercial exchange in the central Mediterranean region in this period and what was the role of Malta in this context? Defining the nature of the products being exchanged and the position of main lines of communication between the Kingdom of Sicily and North Africa are also important to determine Malta's context. It seems that the main occupation of Malta's inhabitants was cotton production, but they also had other sources of income such as trade and piracy. Commercial and pirate ventures were possibly financed by sources outside the island, and an analysis of where the finances came from is important to conclude this discussion. The aim of this chapter is to offer answers to these questions and show that Malta functioned more like a Genoese ship permanently anchored to the south of Sicily for most of its post-Muslim era, especially between 1200 and 1400.

Economic Importance, Resources and Products of Malta in the Late Medieval Period

Roughly between 1200 and 1240, the major trans-Saharan trade routes that had shifted westward due to the Bedouin invasions of the eleventh century were re-established in their original paths.⁷ In fact, medieval trade between Italy and Africa reached its maximum volume in the thirteenth century.⁸ The gradual integration of the Italian cities of Venice, Genoa, Pisa and Amalfi into the economic system of the Mediterranean, that had begun in the twelfth century, was also finalized by this time.⁹ Expansion in the volume of goods circulating between Italian ports and those of Ifriqiya increased the importance of the ports in between, such as Malta. Shortly after the establishment of Tunis as the major urban center of the region (replacing Kairwan) in 1228, the Hafsid ruler, Abu Zakaria Yahya I, extended his control to other important

commercial ports such as Bougie and Algiers. Now that he could control all these centers, he proceeded to conclude commercial treaties with Genoa, Pisa, Venice, and Sicily, while encouraging trade with the Aragonese.

However, the short crossing that could generally be performed in one or two days did not really require a stopping point. The Maltese Islands realistically could only have been a useful stopover point on the route from Venice to North Africa but there is no evidence to suggest that it was a port on this route.¹⁰ It seems that ships on their east-west or north-south routes went through Malta only when they could not use the route that crossed the Straits of Messina because of a conflict in the area.¹¹ However, both the Maltese Islands, and Pantelleria are known to be harbors to escape dangerous weather in this area in contemporary portolans such as the *Compasso da navigare*.¹²

The Maltese Islands also had some commercial products to offer. The fourteenth century manuscript by Francesco Balducci Pegolotti, *La Pratica della Mercatura*, lists the regions of Puglia and Calabria of southern Italy and the islands of Sicily and Malta as important cotton growing and exporting regions.¹³ The early medieval towns of Malta were concentrated in the southeastern half of the island and produced the export crops, primarily cotton and cumin, that were introduced into Maltese agriculture during the Arab period and which constituted the major income source for the island by the mid-thirteenth century.¹⁴ However, it was not until the late-fourteenth century that cotton production acquired the status of a monoculture in Malta.¹⁵ On the other hand, because the cotton and cumin plantations occupied the majority of the cultivated lands, an increasingly large percentage of foodstuffs had to be imported from Sicily, especially after the thirteenth century.

According to information provided in *La Pratica della Mercatura*, it is certain that Malta was producing cotton in the fourteenth century. However, Pegolotti clearly states that the cotton producers (and only those that are included in this section) are listed according to the quality of their raw cotton, meaning not the quality of the fabric but the quality of the unprocessed cotton itself. On this list of eleven locations, Maltese cotton ranks ninth, being better than the cotton from Calabria and Sicily.¹⁶ But even if the quality of the Maltese cotton was not among the highest, the island was one of the few production centers in the western Mediterranean and the product was apparently marketable in Europe. Therefore, cotton cultivation quickly spread around the archipelago.

Cotton cultivation required intensive field labor followed by labor-intensive processing to gin, spin and possibly weave the cloth in order to produce the finished goods for export. In Malta the great labor demands and subsequent employment in cotton processing led to an increase in population.¹⁷ At the same time, Malta shifted from an economy based on subsistence agriculture to an economy based on commerce in which cash flowed as the result of the cotton trade. The change in settlement patterns in later medieval times and the increasing concentration of the population around the *Castrum Maris* were symptomatic of developing commercial activities and growing dependence on external relations (Fig. 22).¹⁸



Fig. 22. Birgu and Senglea from an engraving of 1565. (After: Albert Ganado, "The representation of Birgu and Fort Saint Angelo in Old Maps and Views," in *Birgu, A Maltese Maritime City*, ed. Lino Bugeja, Mario Buhagiar and Stanley Fiorini (Malta, 1993), p. 557, pl. 16.8).

Beginnings of the Genoese Domination

and the Appearance of Counts, Admirals and Pirates in Malta

The distance of the Maltese Islands to the major trade routes of the central Mediterranean made it a remote location that was a very suitable position for the autonomous forces of corsairs as well as pirates.¹⁹ Bresc states that Malta was close enough to the trade routes to prey on merchantmen, but just far enough from the principal areas of military

operations in the central Mediterranean to avoid reprisals for unlawful activities originating in the island.²⁰ For this reason, the Sicilians, who never wished this island to develop into a major pirate base that could threaten the coastal settlements of Sicily and the economic welfare of the island, always had an interest in establishing some level of control.²¹

The Genoese had strong connections with Sicily, which were further strengthened after the crowning of the Holy Roman Emperor Henry VI of Hohenstaufen as the King of Sicily in 1194.²² Expansion of Genoese naval power to the central and eastern Mediterranean in this period also created requirements for additional naval bases along the long-distance trade routes to guarantee the security of the Genoese merchantman. Such intermediate bases at Malta and Crete (for a short time roughly between 1206-1210) kept their distance from the authorities in the major centers such as Palermo and Constantinople, and were also production centers for certain goods generally distributed to the Mediterranean markets on board Genoese ships.²³ Notarial documents indicate that large quantities of Maltese cotton were exported to Genoa as early as 1164.²⁴ The fact that all the Counts of Malta between 1194 and 1220 were Genoese indicates that Malta was under direct Genoese political control at the time.

The first individual to acquire the title “Count of Malta,” Margarito of Brindisi (1194), was a renowned Genoese pirate.²⁵ He was succeeded by another corsair, Guglielmo Grasso, and then by Guglielmo’s son-in-law, the dreaded pirate and corsair Enrico Pescatore, also known as Henry the Count of Malta.²⁶ It is important to emphasize that all these Counts served as Admiral of the Navy to the King of Sicily. Therefore, all the Admirals of the fleet of the King of Sicily were Genoese pirates based in Malta in this period.²⁷

The last of these, Henry, established his sovereignty in Malta, taking advantage of the weakness of the Kingdom of Sicily (and the Byzantine Empire). Henry’s main activities were

piracy and also trade with the Muslims of North Africa. In this period, the Maltese Islands were used as a base to assault Henry's more ambitious target, Crete, with substantial support from the Genoese navy, granted to him in exchange for major commercial concessions made to Genoese merchants.²⁸ It is also important to note that the Maltese Islands remained on the sidelines of the major naval expeditions in the Mediterranean. The Crusades completely bypassed the Maltese Islands, which still had a predominantly Muslim population at the time.²⁹

We see the first determined efforts of the Italian merchant-towns to establish permanent commercial relations with the eastern Mediterranean during the Crusades. Initially, Genoa, Venice and Pisa were the only participants in the conquest of the Holy Land and supporters of the Crusaders. In time, these three were joined by Siena, Ancona and Firenze in northern Italy, Amalfi in the South, the Provence towns of Marseilles, Montpellier and Saint Gilles, and later on, Barcelona. The non-Italian merchants possessed fewer privileges, but they also benefited from the reestablishment of the oriental trade routes, with friendly ports at their eastern ends. The fact that Malta stood outside these developments had an impact on the history of the island. Very simply stated, the European merchants had to pay for the goods they brought back from the East with cash money or by kind. The commerce, therefore, encouraged the development of a money economy and evidently the rise of a merchant class and the overall standard of living. The refreshing effects of the cultural flow in the east-west direction in the Mediterranean reached Malta five centuries later when the Order of Saint John, a creature of the process of exchange itself, arrived in Malta.³⁰

Malta was firmly integrated into the Hohenstaufen Kingdom of Sicily only after Frederick II's reorganization of 1220. However, this reorganization did not alter the basic elements of the Norman administration. Consequently, Syracuse, Malta and the office of the naval admiral remained under the control of Genoese Counts.³¹ It was only gradually that

Frederick acquired control over the Admirals of the Fleet and converted these hostile Genoese freebooters into loyal servants of the Crown. As long as Frederick was able to control his Admiral of the Navy, Malta posed no threat to him. Frederick finally formulated a detailed code of the Admiral's naval duties and privileges when Nicolo Spinola of Genoa succeeded Henry in 1239.³² This code provided the Admiral with jurisdiction over the royal fleet and granted him the right to grant reprisals, license pirates and to preside over civil and criminal cases involving piracy.³³ However, this formulation also integrated Malta into the royal domain and into the defensive matrix of the Kingdom via the installation of a local administrator, *castellan*, directly accountable to Frederick.³⁴

The new situation also meant that the King was responsible for the financial burden of defending the island. The three fortified locations on the Maltese Islands, *Castrum Maris*, the castle of the "city" – Mdina, and the castle in Gozo required expensive maintenance.³⁵

It is also important to remember that at the time Malta still had a large Muslim population. The report by the Governor of Malta, Giliberto Abbate, to Frederick II, presented in detail at the end of the previous chapter, clearly shows that the Maltese Islands had more Muslim families than those of Christian or Jewish faith.³⁶ Cutajar's research of the medieval archaeological material showed that the main connections of the Maltese Islands were with Sicily. Cutajar mentions that most twelfth-century glazed ceramics reached the islands through Sicily.³⁷ Therefore, it seems that Malta's contacts were limited to possibly the food shipments from Sicily in exchange for the local products of the islands. This isolation is possibly the reason why Malta was not affected by the religious conflicts of this era characterized by the Crusades and other hostile encounters throughout the Mediterranean.³⁸

The control of Malta passed to Charles of Anjou after the Battle of Benevento in 1266. However, the basic structures of Norman and Hohenstaufen government remained intact. The Genoese, at the peak of their commercial prosperity, maintained their authority in Sicily and Malta.³⁹ The Eighth Crusade, organized by the Angevins, achieved its objective of capturing Tunis in 1270, and the emir of Tunis became a vassal to Charles of Anjou. After the Eighth Crusade, peace was promptly established and commercial relations between Ifriqiya and Europe continued as usual. Hafsids re-established their contacts with the ports of Aragon, Pisa, Venice and Genoa. The Maltese Islands must have played a possibly minor role in the execution of the Eighth Crusade, as Charles established garrisons on the Maltese Islands, presumably manned by the Maltese.⁴⁰

Increased Angevin involvement in the trade of Ifriqiya must have increased the strategic importance of Malta, as we start to see more serious efforts to establish firmer control of the islands and to keep the Genoese out after the Eighth Crusade. Two additional officers, Giovanni Pontibio and Roberto Caffuro, were appointed in March 1273 to take charge of the maritime defense of Malta and Gozo in the event of an “impending Genoese attack.”⁴¹ However, despite these measures it seems that the Genoese ships continued to interrupt trade around the islands as the *capitan*, *castellan* and *rector* of Malta, Bertrando de Real, reported their “hostile activities” in a letter dated 27 December 1273. A report dated 2 January 1273 announced that de Real seized two Genoese vessels, *Sanctus Nicolaus* belonging to Deotisalve Margonus, and *Sanctus Franciscus* belonging to Lanfranquinus de Assolis.⁴²

Such incidents did not greatly affect Genoese maritime sovereignty in the area. An Angevin document indicates that a ship was sent to Malta in March 1273 to escort the royal galley (with no passengers) back to Sicily due to the lack of safety at sea.⁴³ Considering that the distance from Malta to Sicily is only about 100 kilometers, this measure seems excessive, but the

threat posed by Genoese piracy was a considerable problem. On June 12, 1274, Morier, the viceroy of Sicily, was asked to provide 50 well-armed Frenchmen to accompany Matheo de Podio, the new *castellan*, to Malta.⁴⁴ Another document dated to 1275 mentions that Genoese pirates captured Raymond, a Maltese ‘marenarius,’ who was returning from Africa on the barque belonging to Bonsignore de Gaudisana of Malta.⁴⁵ All these documents indicate that the Angevins did not control the seas south of Sicily, and since all of the hostile activities are of Genoese origin, I am confident that it was Genoa who had control of the east-west passage between Tunisia and Sicily.

The beginning of the decline of Angevin power is marked by a massive rebellion in Sicily against the rule of Charles of Anjou. The beginning of this rebellion, known as the ‘Sicilian Vespers’ (30 March 1282), is the traditional date for the change of government from the Angevins to the Aragonese in Italy.⁴⁶ But, in reality, the change was an extended transition, characterized by extensive conflict between the Aragonese and Angevins (supported by the Genoese) for control of Sicily and Sardinia.

Malta was not directly attacked, but the islands surrendered to the Aragonese in 1283 because of their dependency on Sicilian food. The short period of Maltese resistance ended with a treaty that secured the immediate arrival of the regular grain shipment from Sicily.⁴⁷ King Peter of Aragon (Pedro III), anxious to regulate and recover the eroded royal domain, issued a boon to the “people of Malta” upon their surrender, and brought the island back under direct control of the Sicilian Crown “in perpetuity.”⁴⁸ The message of Pedro III to the *castellan* da Barba, which was sent on the day Malta passed voluntarily under his rule and got the first shipment of grain from Sicily, suggests that there were ‘enemy’ threats requiring additional Maltese naval assistance. The naval support was to be provided when the enemy threat was at hand.⁴⁹

A notarial document dated 9 February 1283 records a merchant vessel, belonging to a certain Christofaro da Malta with a cargo of wine and carobs destined for Syracuse. This indicates that trade activities were back to normal by February 1283.⁵⁰ On the other hand, *Castrum Maris* was still under Angevin control and, to make matters worse, a large Angevin fleet from Marseilles arrived in mid 1283, threatening the Aragonese position in Sicily and its African supply lines.

According to the thirteenth-century chronicle written by Bernardo D'Esclot, a number of Angevin (Provincial) galleys escaped to Malta in 1283, and the men on the galleys took control of the castle. The chronicle mentions that the castle in question is the main city on the island, which would have been Mdina but according to the account of events it must have been *Castrum Maris*.⁵¹ The Angevins were chased (two days behind) by the galleys of the King of Aragon and Sicily, under the command of Roger of Lauria, arriving at the harbor of Malta soon after. The naval battle that followed is one of the most famous encounters of galley warfare and was studied in detail by many scholars.⁵² Details of this encounter are not directly relevant in terms of understanding the maritime history of Malta, but the result of the conflict was a famous Aragonese victory.⁵³ However, even after the Battle of Malta, the *Castrum Maris* held out and was regularly supplied by sea, presumably by Genoese ships that frequented the harbor. When it finally fell into Aragonese hands in February 1284, new settlers of Catalanian, Valencian and Majorcan origin were integrated into the commercial sector of Malta. These migrants were practiced merchants with well-established connections in the Levant and North Africa, and their experiences abroad introduced new challenges and competition.⁵⁴

It is interesting that there is no archaeological evidence of trade or incoming goods to Malta prior to the Aragonese period. According to Luttrell, the excavations of medieval remains in Malta reveal that most of the pottery was manufactured locally using the same techniques and

styles of the previous centuries.⁵⁵ Contradicting Luttrell's findings, Cutajar states that ceramics imported from Tunisia, Brindisi, Taranto, Campania, southwest Sicily, and possibly from Spain and the eastern Mediterranean appear in Malta as early as the thirteenth century.⁵⁶ Archaeological evidence is hard to interpret in this case, since the ceramics found in Malta represent examples of very common and widespread types, which also are very common in Sicilian contexts of this period. Therefore, it is quite possible that the ceramics reached the Maltese Islands through Sicily, along with all the other Sicilian pottery that continued to dominate the Maltese archaeological contexts as the major class of imported pottery. It is also possible that at least some of these artifacts originating from Spain were the personal belongings of the incoming immigrants. It should also be noted that Maltese medieval sites are very hard to date because most ceramics are locally produced, and because there are very few chronologies for central and western Mediterranean ceramics in general. The extent to which the Maltese Islands were subjected to cultural, political and commercial influences from the outside world is, therefore, very hard to determine.

1284-1380: One Century of Naval Plundering in the Mediterranean

The series of conflicts referred to as the *Hundred Years War between Venice and Genoa* (1256-1381) had a direct effect on the development of Genoese interests in Malta and on the rise of piracy in the Mediterranean. Piracy had been 'a natural part of life' in the Mediterranean since the tenth and eleventh centuries. Pisa, Genoa and, to some extent Venice, were the major maritime cities involved in piracy, but they also maintained fleets to fight foreign pirates in their own waters.⁵⁷ The Venetian defeat by the Genoese at the Battle of Curzola (1294-99) was followed by the Treaty of Milan, which only restrained Venice and Genoa from each other's territorial waters in times of war, but left the question of supremacy unresolved.⁵⁸ The vague

language of the Treaty of Milan resulted in a sharp rise in piracy, as rivals continued to struggle for dominance over trade.

The Genoese received trade concessions from Constantinople for their efforts in reestablishing the Byzantine Empire in 1261. Meanwhile, the Catalans established a foothold in the Duchy of Athens and threatened to expand their operations to Romania. Because the situation was completely out of control and the Catalanians were disrupting commercial shipping, the Venetians assigned patrol ships in 1301 to secure the safe conduct of their merchantmen and armed their own corsairs.⁵⁹ The tensions created by the conflicts between Angevins, Sicilians, Genoese, Venetians, Byzantines, and Catalans constantly threatened the passage of merchant shipping. In addition, although there were penalties for attacking the ships of allies, it was not always easy to make the distinction between friend and foe, nor was it easy to keep current with information during this period of constant political change.⁶⁰

The fourteenth century was also a turning point in the history of naval plundering during which the distinction between pirates and corsairs became concrete. Briefly, a corsair may be differentiated from a pirate insofar as he obtained some form of permission from the mother state to commit aggressive acts. Assaults were restricted to times of war and only against enemy vessels. Diverging from either of these two conditions was considered a piratical act. A pirate ravaged the seas of his own accord without legal sanction. He chose his targets more or less indiscriminately and amassed his prizes or booty for his profit alone.⁶¹ Therefore, it was not the act that rendered itself legitimate, nor the actor, but only the authorization: certain forms of violence such as war, quasi-war of marque, reprisal, and piracy were strict royal monopolies.⁶² Evidence suggests that the scope of maritime aggression shifted in the fourteenth century to include privateering and legitimate piracy.⁶³ Conversely, many of the maritime cities were deprived of invaluable manpower due to the famine of 1315-1317 followed by the Black Death

that dispatched one-third of the population of Europe between 1347 and 1530. Cities were willing to settle differences by negotiation and compromise in order to avoid the continued loss of experienced sailors and rowers.⁶⁴ In accordance with that precept, many Italian maritime republics tried to avoid the use of true corsairs under the banner of war, but granted their captains the freedom to raid enemy merchandise and vessels nonetheless.⁶⁵ Under these circumstances, shippers had to be allied to one power that regularly shipped their merchandise in order to ensure the safety of the vessel, the crew and the cargo.⁶⁶

At the beginning of the fourteenth century, the Genoese had strong control over the flow of their commercial merchandise, regulated piracy and protected their merchant ships, but ‘the crisis of the fourteenth century’ had changed the political and economic reality for Genoa. Castilian ‘Atlantic-type’ vessels began to appear in Sicilian waters after 1311, and Catalan naval power presented a direct threat to Genoese shipping. For example, a Narbonnese cog carrying alum and waxed leathers from Loredan was captured by Catalan corsairs and brought to Malta.⁶⁷ Attempts at cooperation between Genoa and Venice foundered on the banks of suspicion and envy, compelling Genoa to cooperate with Catalonia itself; a treaty with the King of Sicily was put into effect in 1350.⁶⁸ At the same time, a precautionary patrol fleet was organized in order to guarantee the security of grain shipments from Sicily to Genoa.⁶⁹ Unfortunately, in the same year the Aragonese, now established in Sardinia, formed an alliance with Venice to compete with the Genoese and Catalonians. Genoa found herself in an untenable position that could not be remedied without external aid, and she began to decline as a maritime power in 1350.⁷⁰

The decline of Genoa had negative effects on the well-being of Malta. The rest of the fourteenth century is characterized by repetition of the same depressing scenario: the Aragonese Crown concedes Malta to Sicilian magnates; the local population, anxious to escape exploitation by rapacious absentee Counts, petitions for re-incorporation into the Royal domain; the Crown

concedes this request in perpetuity, but subsequently grants out the island once again.⁷¹ Thus, the documentary evidence from this period is obscure and fragmentary. However, two definitive statements are possible based on the evidence that is presented below: (1) Malta was still a Genoese ‘territory’ because there is no evidence whatsoever of Venetian, Catalanian or Castilian presence and,⁷² (2) the trade contacts and connections with Sicily continued as usual. The following incident summarizes the situation in fourteenth century Malta and how complicated and interwoven the politics had become.

The Chiaramonte Incident

Manfredi Chiaramonte was the viceroy of the Aragonese King of Sicily (Frederick IV) and the Admiral of Sicily.⁷³ At the same time, he had cotton interests in Malta that he was exploiting with the aid of a group of Genoese merchants and financiers. Giacomo de Pellegrino of Messina was the *castellan* as well as the *capitano* of Malta. On 26 October 1361, Pellegrino began to launch pirate attacks on Genoese ships bound for North Africa. It is possible that Pellegrino was also involved in the cotton trade, since he owed large sums of money to a few of the Genoese whose ships he was assaulting. As mentioned earlier it is difficult to tell the difference between corsairs and pirates based on documentary evidence but, in Pellegrino’s case, it is clear that he was not authorized as a corsair by the King and had to be stopped, especially since he was interfering in the Admiral’s commercial interests. Therefore, in 1372 Frederick IV, King of Sicily, had to intervene to restore order in Malta. Frederick’s fleet was supported by ten Genoese galleys and was commanded by Chiaramonte.⁷⁴ With the help of local royalists the *Castrum Maris* was recaptured and Pellegrino was banished.⁷⁵ King Frederick rewarded a number of local royalists, *servientes*, who had helped him recapture the castle, by forgiving their debts to Pellegrino.⁷⁶

The whole episode of 1372 is as confusing as it is interesting. First, the fact that a local officer attained the status required to keep the island as a pirate base under his control for eleven years is significant. However, it seems that Pellegrino financed his piratical ventures, at least initially, with the profit he made through commercial activities with Genoese partners. The fact that he did not pay his Genoese partners' shares could account for the extra wealth he needed for his rebellion to control the island. Second, the fact that Frederick IV rewarded at least three *servientes* of the castle indicated inside collaboration on the part of the King. However, the fact that the "reward" was in the form of "forgiving their debts to Pellegrino" indicates that the *servientes* were also involved in commercial ventures and were Pellegrino's credit partners as well. Third, the considerable naval force (some unknown number of vessels that Frederick IV supplied and the Genoese contribution of ten galleys) indicates that Pellegrino established a very strong military presence that required the deployment of such a fleet. Documents indicate that the ten Genoese galleys were not leased to Frederick IV, but were in fact sent as a Genoese contribution to the King's forces. The fact that the Genoese helped Frederick to defeat a pirate who attacked Genoese shipping indicates that there was substantial Genoese shipping to be protected, and that the Genoese had interests in re-establishing order in Malta. Lastly, the fact that this whole incident took place in a period when the Aragonese and the Venetians were at war with the Genoese is remarkable. It underscores to what extent trade and politics were interwoven in this period, and that the major trade ventures were probably in the hands of royal and local officers who employed the Genoese as financiers and shipping agents.

The War of Chioggia and Its Effects on Malta

The Genoese defeat in the War of Chioggia (1378-1381) marked the end of the *Hundred Years' War of Venice and Genoa*. While the Venetians accumulated possessions in the eastern Mediterranean, the Genoese turned to business and financial operations in Western Europe and the Atlantic.⁷⁷ Although the Genoese turned increasingly from trade to finance and began to use mercantile partners in the West, incidents like the sack of Djerba in 1388 and the assault of Mahdia in 1390 indicate that Genoese “interests” in the central Mediterranean were not completely abandoned. North Africa was still an excellent market for the products of southern Spain, and Genoa still had footholds from Morocco to Tripoli that demanded Spanish products be shipped on board Genoese bulk carriers. Meanwhile, Genoese merchants were establishing an ever-tightening grip on the economies of Iberia, while also dominating the sugar trade of the new Portuguese Atlantic islands, and monopolizing trade with the Castilian mercury mines at Almaden.⁷⁸

Documentary evidence also indicates that Malta continued to be close to Genoa after 1380. However, it is at this time that the first indications of Venetian presence in Malta are apparent. Admiral Chiaramonte was still involved in trade and had interests in Malta but began to explore a new area, the Republic of Ragusa (Dubrovnik) in the Adriatic. Documents, including a proposal for a trade agreement between Ragusa and Malta are preserved in the archives.⁷⁹ Although information regarding Adriatic trade connections is limited, the establishment of a regular trade route between Malta and Ragusa automatically drew Venetian attention. Venice had very close connections with Ragusa, and the Venetian *capitaneus culfi* (commander of the maritime patrol in the Adriatic) controlled the shipping and had the right to stop, search and seize unwelcome vessels, including those of Genoa.⁸⁰ Another document of

1387 indicates that Chiaramonte offered the Venetians free access to the island and guaranteed liberty and security of trade there.⁸¹ The account concerning the wreck of a Venetian *cocca* in the Grand Harbor in 1397/8 provides the first definitive evidence of a Venetian presence in the port of Malta.⁸²

Malta after the Genoese: Rebellions and Destruction

The traveler's accounts written in 1394 by an Italian notary named Nicolas Martoni indicate that Malta was producing cotton, cumin, wine, meat, and wheat, painting a picture that reflects the islands as quite prosperous places in the fourteenth century.⁸³ Unfortunately, the end of this period is characterized by rebellions that eventually led to the complete destruction of the island as a commercial center. Two successive rebellions, led by Artale Alagona (1396) and Guglielmo Raimondo III di Moncada (1397), had devastating effects on trade and the condition of the port of Malta.⁸⁴ Alagona was the tutor of Princess Maria, the only heir of Frederick IV, King of Sicily.⁸⁵ The reasons for the rebellion led by Alagona are not clear, but the incidents began with piratical attacks on settlements along the Sicilian coast. The pirate vessels that harbored at Malta included two of the 'rebellious traitor' Alagona's galleys and four Genoese pirate galleys.⁸⁶ The rebellion was quickly suppressed by Guglielmo Raimondo III di Moncada, Count of Augusta and of Novara, when he was assigned as the Marquis of Malta and Gozo and the *castellan* of Malta, only to lead a revolt himself against the Sicilian Crown a year later.

Information concerning Moncada is ambiguous since some sources do not place him in Malta at all.⁸⁷ However, all sources agree that he was a pirate and a corsair.⁸⁸ Shortly after Moncada inherited the County of Augusta in 1378, he sold his land there and bought two ships in 1383 and 1384, with a desire to become a corsair. During the following years, he focused his activities in the Levant, but documentary evidence suggests that about 1390 he extended his area

of operation and began launching attacks on Tunisian ships (Tunis was an ally of Aragon at the time), Genoese ships, and even Catalan ships in the central Mediterranean. Although some of his activities were deemed ‘piratical’, he generally kept the distinguished title of “corsair” and was not charged with piracy. The end of his brilliant career as a corsair came with his rebellion in January 1397. The causes of his revolt are unknown but were probably a reaction to the incorporation of Augusta into the royal domain.⁸⁹ It is not clear whether Moncada was in Malta during the revolt or if supporters there had taken up his cause. In either case, it is known that the *Castrum Maris* was ruined during the efforts to suppress the revolt and that Malta was reincorporated into the royal domain by King Martin I.

Additional taxes were promptly exacted to cover costs of repairs to the castle. The new taxes included: (1) one florin on each *butte* of imported wine and two *quartuchi* on the sale of wine by retail, (2) one *tari* on every *uncia* of all trade goods (both imports and exports), and (3) one Maltese *tari* on every *ubara* of oil.⁹⁰ Furthermore, royal supporters were rewarded with exemption from various duties and taxes. It is likely that the high rate of taxation discouraged the merchants of Birgu from operating in Malta. A decrease in royal income inhibited the maintenance and repair of the *Castrum Maris*, which, in turn, weakened the settlement. In 1406 the castle was reported to be partly in ruins.⁹¹ In all, Malta never recovered from the incident of 1397, and the history of Malta can be characterized as miserable until the arrival of the Order of Saint John in 1530.

The primary reason for the marked economic decline of Malta was the disappearance of Genoese predominance in maritime trade in the central Mediterranean. Genoa endured fourteen revolutions between 1413 and 1453, and was in foreign hands for much of the fifteenth century before becoming a client, first, of the French and then, of the Spanish Crown.⁹² In addition, while the Catalans were trying to trap the Genoese in their harbor by terrorizing the seas with

corsairs, the Genoese took over the sector of financing in Barcelona, Malaga, Seville, Cadiz, and Lisbon and acquired a dominant position over the routes to Britain and Flanders.⁹³ The alum of Catalonia was shipped to the cloth makers of northern Europe on Genoese ships and under Genoese finances. The nature of this traffic required the employment of ships suitable for bulk transport (*carracks*), and these comprised an overwhelming part of the Genoese merchant fleet in the fifteenth century. Because the large *carracks* were not economical conveyors of many other types of products, the Genoese merchant fleet specialized completely in the alum trade and abandoned their shipping lines in the central Mediterranean.⁹⁴ The second major reason for the decline of Malta was ever-increasing piracy in the central Mediterranean after the definitive conquest of Sicily by King Martin in 1398. The pirate ships of, first, Catalan and, then, Castilian and Basque origin generally used the Sicilian ports as their bases.⁹⁵ The adverse effects of increasing piracy are illustrated by an incident in 1399, when a *galiote* of Syracuse belonging to Jannuczu di Prestiangelu, captured a ship (a *ligne*) that belonged to a certain Maltese named Philippu. According to the document, the ship was carrying wine and slaves to Tunis.⁹⁶

The economy of Malta seems to have declined considerably with the decline of Genoese trade in the central Mediterranean. One of the desperate measures taken by the *Università*,⁹⁷ was the arming of an 'official' pirate ship, in the hope of sustaining the poor local economy.⁹⁸ Reports dating to the beginning of the fifteenth century indicate that the fortifications and harbors of Malta were in need of repair.⁹⁹ It is possible, in view of the poor state of the island, that King Martin exempted the inhabitants of the *Castrum Maris* from all new taxes in 1408.¹⁰⁰ In 1416 King Alfonso granted permission to the *Università* of Malta for the construction of a tower on Comino. To provide the funds for this construction, the King allowed the Jurats to impose a tax of one florin per barrel (*botte*) of imported wine. The income of the shuttle boat that worked between Malta and Gozo, run by the *Università* and known as the *mahadia*, was also

to be taxed.¹⁰¹ Another decree by the King in 1416 stated that the *castellan* could not interfere with anything extending beyond the castle's ditch, and that he could not license any corsairs. The licensing of corsairs now fell under the jurisdiction of the *capitano* (the equivalent of a town-mayor who was also responsible for Birgu, the port settlement around the castle). King Alfonso V of Aragon subsequently confirmed the town's claim that the jurisdiction of the *castellan* did not extend beyond the ditch, and that the *castellans* were not to interfere with vessels entering or leaving the port.¹⁰² This caused great tension between the *castellan* and the *capitano*, and both refused to take charge of the required repairs. Besides, now that the islands were not enjoying naval protection provided by Genoese vessels of all types (including pirates and corsairs), one of the essential requirements became the upkeep of a galley and a brigantine (for quick communications) to defend the *Castrum Maris*.¹⁰³ All these expenses made the devastated port of Malta far from profitable for the Crown. Malta desperately needed funds directly from the Crown treasury for repairs and other defense requirements.

To make matters worse, Alfonso V of Aragon was also in distress. High mortality from the plague in the Kingdom of Aragon in the 1440s, failure of Catalan banks and depletion of gold and silver reserves in the 1440s and 1450s all contributed to an economic crisis.¹⁰⁴ In urgent need of money, Alfonso broke Martin's charter and in 1420 pledged Malta to the viceroy of Sicily, Antonio Cardona for 30,000 gold florins.¹⁰⁵ Subsequently, the islands were given to Gonsalvo di Monroy for the same sum in 1425.

This semi-autonomous status granted to the islands (just like Pantelleria) saved the King from paying for defensive expenses. The fact that the islands were not generating an income that would enable the new rulers to pay for such costs remained a constant problem. The lack of direct royal control led to an increased atmosphere of tolerance for unlawful behavior, and the new rulers could only afford to provide the funds necessary for defense from an alternative

income source, piracy. For example, the galley assigned to protect the *Castrum Maris* was first financed by Francesco Gatt (1398), and was replaced by a 'nova galea' belonging to Ingarao Desguanesch in 1402.¹⁰⁶ Archival documents indicate that Ingarao Desguanesch was the owner of a vessel involved in grain shipment between Sicily (Syracuse and Brucoli) and Malta.¹⁰⁷ However, the names of Ingarao and Antoni Desguanesch appear on many documents related to piracy as owners of corsair ships. One of the Desguanesch ships (a *fusta*) was taken by Venetian corsairs in the eastern Mediterranean as a prize in 1443.¹⁰⁸ Except for that one loss, it seems that the Desguanesch ships were very successful corsairs themselves, as there is documentation that a total of four *fuste(s)*, three *galiots* and a *bireme* owned by either Antoni or Ingarao Desguanesch, and commanded by various captains, captured North African (Moorish), Sicilian and Ragusan ships and cargoes as prizes between the years 1443 and 1447.¹⁰⁹

However, the rule of Gonsalvo di Monroy, who made great extortions, was largely unpopular, leading to the revolt of the Maltese in 1427 against his rule. Maltese ambassadors were sent to the viceroy in Sicily to settle the problem, and their pledges ultimately led to the reincorporation of both islands into the royal domains via a new charter on June 20, 1428.¹¹⁰ The same decree also stated that the islands would never again be granted as a fief and that five percent of the money acquired from corsair looting was to be kept in an account to be used for repair of the castle.¹¹¹ The efficacy of the regulation is not clear, but a report written by the *castellan* Guterra de Nava on March 15, 1429 announced that the castle was once again serviceable. As a result, the Maltese were able to resist the great Moorish invasion of September 1429.¹¹²

Moorish raids seem to have continued in the following years. Archival documents include a petition by the Secreto of Gozo to the Crown (dated 1432) regarding problems created by Moorish attacks and the shortage of food on the island.¹¹³ Other documents communicating

to the King the security concerns of the Jurats on the island, and replies by the King expressing his own financial problems point to the fact that the attacks continued until 1494.¹¹⁴

While Malta was suffering, trade in the central Mediterranean was flourishing to reach one of its most lucrative periods, as commercial contacts with the Muslims were largely tolerated in this period. Merchants from Venice, Catalonia, Naples, Messina, Syracuse, Mazara, and Trapani all were involved in trading weapons, iron, wood and lead to North Africa.¹¹⁵ This trade, coupled with the weakness of the Sicilian Crown attracted increasing numbers of pirates and corsairs to the area. In 1442 a corsair named Juan de la Corogne brought the Florentine vessel he had captured to Gozo, and the galleys of Pedro del Busch captured a Venetian *nef*, to be sold in Gozo.¹¹⁶ An order from the viceroy of Sicily dated 1453 instructs the royal vessels to capture the six Genoese vessels loaded with the merchandise 'evacuated' from Constantinople.¹¹⁷ In 1456 six galleys – under the guise of crusade – attacked a Genoese *nef* on its way to Tripoli and Tunis.¹¹⁸ Piracy was the only lucrative business for the Maltese but it was also a business with high risks. The corsairs and pirates were not reliable business partners. They frequently attacked friendly ships and were sometimes reluctant to share the profit with the ship owner who financed the expedition, as the latter often was based on land and had no way of knowing the value of the captured prize.¹¹⁹

Another serious problem faced by the Maltese Islands and everywhere else around the Mediterranean was the bubonic plague that was endemic from 1347 until its complete disappearance in 1844.¹²⁰ This epidemic, known as the Black Death, possibly originated from Mongolia, spread to the Black Sea port of Caffa, and from there to Constantinople, Alexandria, Cairo, Messina, and Sicily.¹²¹ The first outbreaks in Europe occurred in 1348, almost simultaneously, in all major maritime ports: Pisa, Genoa, Venice, Marseilles and Barcelona.¹²² Bubonic plague was the most devastating natural disaster ever to strike Europe, killing three

Europeans out of ten within the first five years of its rapid spread on the continent.¹²³ Certain areas in Europe, and especially the major ports were hit worse than the others: the population of Florence was reduced to one third of its previous size after being hit eight times by the plague between 1348 and 1427,¹²⁴ and Venice lost sixty percent of its population between 1348 and the summer of 1350.¹²⁵ After the middle fifteenth century mortality rates in Europe began to decrease in comparison to those in the Muslim Middle East, thus, requiring a strict quarantine system to avoid the return of the dreadful disease.¹²⁶

The plague first threatened the port of Malta during the second half of the fifteenth century.¹²⁷ Although the plague itself does not seem to have reached the island, the period between 1454 and 1524 is characterized by an extensive paranoia, and the resulting precautions brought economic activities of the port of Malta almost to a standstill.

The first reference to a plague alarm dates to October 21, 1454 when the town council met to discuss the arrival of a ship belonging to a merchant from Messina. Because there were rumors about an outbreak of the disease in Messina, the council's decision was to expel this ship immediately and ban contact with the crew. Four years later news reached Malta that the plague had spread to Syracuse. The government responded by barring admission to the island. On June 22, 1458 the town crier proclaimed at Birgu and Qormi that no one was to come into contact with the men of the galley belonging to Johannes de la Turri under threat of a 100 *uncie* fine. In July 1475 ships coming from Trapani, where plague was reported, were also included in the expanded restraining order.¹²⁸ Another unfortunate incident took place in 1488, when almost all ships from ports in Sicily were refused entry, even though provisions in Malta were running low.

Meanwhile, the plague had reached Tripoli in the early sixteenth century, and fear of its reaching Malta increased considerably after the Spanish invasion of Tripoli in 1520.¹²⁹

Eventually, the plague reached Malta in 1523, probably on board a galleon belonging to Don Ugone de Moncada, with a cargo from Tripoli. The town council set the ship afire in the open sea but apparently this did not help because cases of the plague were reported in Birgu. Soon after this incident, the town crier announced that no vessel was allowed to enter or leave the harbor.¹³⁰ To prevent the spread of plague to the countryside, people of Mdina and Rabat guarded the limits of Birgu until the town council finally lifted restrictions on the inhabitants of Birgu on June 30, 1524.¹³¹

The period of plague in Malta coincided with a period of intensified piracy in the central Mediterranean. Fast ships such as caravels and brigantines proved efficient in chasing and capturing the bulky Mediterranean merchant ships, and Catalan and Castilian corsairs in time completely destroyed Sicilian trade.¹³² There was also an increase in the Ottoman naval activities in the Central Mediterranean. Twelve Ottoman galleys attacked the harbor settlement of Malta, Birgu, in 1488, plundered a cache of cotton and cloth, and captured 80 people.¹³³ After this raid, preparing to defend the island against Ottoman attacks became a serious consideration. The Royal Court at Naples sent Francesco Patella, the Chief Harbor Master, and Jacobo Tudisco to Malta equipped with a naval contingent consisting of “barques, ships and men-at-arms” to protect the islands.¹³⁴ In a letter dated June 13, 1513, the King ordered his viceroy Ugone de Moncada to pay the Portuguese captain, Pietro de Texaro, who had been sent to protect the Maltese Islands with his ships.¹³⁵

In terms of Malta, the only evidence of trade in this period are three partnership deeds from the notarial registers of 1504-1518 indicating that local Maltese merchants from Birgu participated in, or financed, trading operations.¹³⁶ These are the first trade contracts known that involve locals with Maltese surnames, and it is possible that in the absence of foreign merchants the locals were encouraged to conduct their own business.¹³⁷ Also, the Maltese ships, with no

other options, became involved in piracy as evidenced by three feluccas plundering Ragusa and taking prisoners.¹³⁸ This attack is also the first known documentation of “Maltese” ships committing acts of piracy.

In the meantime, the concerns of the local government regarding the inadequacy of the defenses against the growing Ottoman threat were increasingly communicated to the viceroy in Sicily.¹³⁹

Conclusion

Although the population of Malta was dependent on Sicily for grain, the island appears to have had closer connections with Genoa. It is also true that even though Genoa controlled the flow of large quantities of merchandise in the Mediterranean, this city also depended on regular shipments of Sicilian grain. Genoa’s major sources of income were from trade and piracy, and Malta was in a suitable geographic and strategic position for both activities. Therefore, the Genoese appear to have been interested in keeping the port of Malta as a friendly shelter and a small market for exchanging plundered goods and slaves.

Raiding merchant shipping with a letter of marque issued by a political authority was a ‘legitimate’ form of warfare in the Middle Ages.¹⁴⁰ During the late medieval period virtually all people agreed that if a man from one city were injured, defrauded or robbed by a man of another city, the wronged party might recoup his loss or avenge his injury on the goods of his injurer’s compatriots as long as the creditor was officially sanctioned and provided with a letter of marque.¹⁴¹ Corsairing and trade were interwoven and the same person could simultaneously be a merchant, pirate, corsair, admiral or any combination of these. Because jurisdiction over Malta rested with the King of Sicily, acts of piracy may or may not have been subject to penalty, and

would have been open to the King's interpretation based on the current political situation. Whether an admiral was a pirate or not, his acts were rightful and his jurisdiction legitimate because he was a sovereign's agent; what he did was authorized by man and God. In this context, Malta became at times a port of armament where piracy was financed and centralized. The islands provided sailors for the corsair and privateer ships, and in return became a market where the prizes were sold.

The Genoese brought some measure of wealth to Malta in the Medieval Period, not only by financing the modest cotton trade but also by utilizing the island as a pirate base. As long as it did not interfere with royal interests and not directly threaten the interests of the King of Sicily, such activity was tolerated as it increased the royal income through taxes on the markets of Birgu, and also through the royal percentage taken from the corsair loot.

What the Genoese did not bring to Malta was a general economic and social renaissance. Effects of increased maritime trade and cosmopolitanism seem to have been restricted to the harbor area. The rest of the archipelago was under control of the ecclesiastical authorities, especially during the period of Aragonese control between 1283 and 1410. Like everywhere else, the institutions of church and state were united by the Spanish Inquisition in Malta. The economic development of the islands was constricted internally with feudalism and externally by Spain's foreign policy. In Europe there was increased interest in secular nationalism at the beginning of the fifteenth century. In Malta, on the other hand, civil authority and control of taxation remained in the hands of the nobility and the bishops, and there was no middle class *per se*.¹⁴² Consequently, development of financial institutions and economic structures required for the development of trade did not occur in Malta, mainly for reasons related to the harsh rule of the Spanish Inquisition.

The Genoese presence and patronage provided Malta with a context and a role to play that took advantage of the geographical location of the island. By controlling Malta the Genoese gained access to an excellent harbor located favorably for commerce as well as piracy. But the Genoese never took possession of Malta per se, possibly to avoid the costs of attacking and defending the island. In other words, the harbor facilities offered by Malta were desirable, but the annexation of the island was not feasible. The Kings of Sicily only cared about Malta only to the extent that they did not want it to fall into the hands of an enemy who could not be controlled through diplomacy. Genoa seemed to fit this description, as no Genoese fleet ever launched an attack against Sicily from Malta.

After the end of Genoese economic domination in the central Mediterranean, Malta's economic situation rapidly declined. By the time the Knights of Saint John arrived in Malta in 1530, the island was in a poor economic state, the coastal fortification in the harbor area was in ruins, and there was no substantial production or trade. The Knights of Saint John initially refused to accept Malta as their base (in 1524) because the island did not have the population and agrarian base to support their presence.

The only important improvement that took place during the period of Spanish rule was the development of a local government which entailed the recognition of the island as a *Università*, i.e., a commune with two officials annually elected from among the Maltese.¹⁴³ This was the only time in Maltese history (prior to independence in 1964) that the islands had some type of local rule (although nominally controlled by the King of Sicily).

CHAPTER IX

HISTORICAL BACKGROUND AND THE ARRIVAL OF THE ORDER OF SAINT JOHN IN MALTA

Historical Background

By the time the Hospitaller Order of Saint John of Jerusalem reached the central Mediterranean island of Malta, it had already had seen over four centuries of history. The Order of Saint John grew out of a hospice for the care of pilgrims in eleventh-century Jerusalem into a religious and hospitaller brotherhood, which dedicated its service to the poor and to sick pilgrims. After the first crusade and after a considerable increase of members and properties in the Holy Land and in Europe, the brotherhood was formed in 1113 into a religious order of the Catholic Church. Conditions in the Holy Land became increasingly turbulent, leading to increased involvement of the members of the Order in the military affairs of the Crusader States, thus evolving after 1120 into a military order integrating the monastic and military ways of life bound by vows of poverty, chastity and obedience.¹

Transport by sea was the quickest, cheapest and safest way of traveling between Europe and the Holy Land, and the Knights had to undertake seafaring activities over and above their military duties.² The permanent fleet did not develop as long as there was still a Christian foothold in the Holy Land. The earliest evidence that might suggest the existence of an armed Hospitaller fleet is the obscure title of *Commendator navium*, encountered in a document dating to 1234.³

With the fall of Acre in 1292, the Hospitallers retreated to Limassol on Cyprus. The new residence on an island required a stronger fleet to guard this position, leading to the official initiation of the Order's navy in 1300.⁴ In 1306-1307 the Order of Saint John purchased the islands of Rhodes, Kos and Leros from Genoese admiral Vignolo Vignoli, who had established control over these supposedly Byzantine islands. Little is known about the Order's occupation of the islands but it appears to have involved fighting against the local inhabitants who fiercely opposed the Order's arrival.⁵

Neither the change in location, nor the increasingly anomalous position of an international chivalric Order at a time when national interests were gradually overtaking the crusading ideal tempered the Knights' hostility to the Muslim powers. Indeed, without a military role the Order could scarcely have justified its continued existence.⁶ The increasing vitality of Muslim shipping in the area necessitated a concentrated effort by the Knights to arm a fleet to counter the danger posed by the growing fleet of the Ottoman Empire and to prevent or at least interrupt Ottoman merchantmen from navigating freely in the Eastern Mediterranean.

The Order maintained a fleet from this time until Napoleon conquered the Island of Malta in 1789. The Order of Saint John had two major functions to justify its existence and to acquire financial and political support for its survival. The first function, outside the scope of this manuscript, was to provide hospital services to those in need. The second was to fight the forces of Islam that were arrayed against Christendom. Acquiring the status of an island nation since the thirteenth century, its major weapon performing its tasks was the navy. Recognition of the organization, administration, function, and performance of this fleet is, therefore, key to understanding the political, economic and military context of the Order during its three centuries of activity in the central Mediterranean.

Arrival of the Order in Malta

The expulsion of the Order of Saint John from its base in Rhodes in 1522 and its arrival in Malta was a turning point in history for the Knights and the island. Information about the events of this period survived through contemporary historical documents. In addition to the accounts, iconography appears as an alternative source of information, providing data especially about the specifics of the naval forces of these new occupants of Malta when they first arrived at the island.

In studying this period, it is not always easy to recognize the distinction between the objective truth regarding the actual events and the official historical accounts, which were sometimes manipulated to further a political agenda. Interpretation of the texts and paintings requires an understanding of the period and the circumstances under which these works were created. It is apparent that in most cases these official accounts and paintings served to promote the power and glory of the Order of Saint John. Impartiality was not the major objective in recording occurrences but most events were real. Thus, a general description of the Mediterranean world at the middle of the sixteenth century is crucial to determine the extent of exaggeration that may be present in descriptions of both general events and specific characteristics of the naval forces. A realistic assessment of the composition and accomplishments of this initial fleet is also important to comprehend subsequent naval developments. However, because of textual and iconographic discrepancies regarding specific ships, relevant discussions about the details are presented in a separate Appendix (Appendix B).

It is important to emphasize that the Order's ships not only provided transportation, but also served as floating homes for the Knights and the thousands of Rhodians who accompanied them during this journey, which occurred between the fall of Rhodes in 1522 and the arrival of the Order in Malta in 1530. The reason for the length of this journey and the circumstances that led to the selection of Malta as a new base ultimately determined how the Order of Saint John and its naval forces were organized between 1530 and 1798.

Mediterranean in the Sixteenth Century

The sixteenth century in Europe was a time of unprecedented change, caused by revolutions in almost every aspect of life.⁷ The century opened with the discovery of new continents. The renaissance in Italy was at its height and was spreading north. Especially at the beginning of the century, life was relatively prosperous for the average European, the economy was growing and population was increasing. The mechanisms of commerce started to depend on the developing systems of international finance. Establishment of annual trans-Mediterranean commercial shipments, as well as regular trade with India, led to the development of an entrepreneurial bourgeoisie and a capitalist, money-based economy. Technological innovations like the employment of advanced casting techniques and gunpowder were changing the nature of warfare, leading to the rise of the centralized nation-states. The printing press created a media revolution and the first half of the century saw what contemporaries viewed as the most earth-shattering change in the century, breaking the religious and cultural consensus of Europe: the Reformation.

In 1503 the Portuguese launched a serious challenge to Mediterranean hegemony in the spice trade by bringing pepper directly from India and marketing the prized commodity at lower prices by eliminating the Middle Eastern middlemen. The rise of Atlantic seafaring coincided with a marked growth in population in the Mediterranean world, while its agricultural production began to stagnate. Towards the middle of the century, prices started to rise, and the inflationary spiral worsened with the flow of bullion from the Americas to Spain. The search for inexpensive grain intensified throughout Europe as the sixteenth century progressed. To meet the demand, the ships of England and the Hanseatic League regularly sailed to Mediterranean ports in search of grain. Because the English and Dutch ships were built to carry bulk cargoes, their tonnage almost doubled that carried by their Mediterranean counterparts. New trade routes, inflation in vital sectors of the economy, and the growing influence of northwestern European seafarers in the Mediterranean were all accompanied by bitter wars of religion. While soldiers and sailors of the Cross battled those of the Crescent, the armies of Catholic monarchs fought to counter the progress of Martin Luther's Reformation. At the center of both struggles stood Charles the Habsburg, the first Charles to become king of Spain and the fifth to be crowned Holy Roman Emperor. His extensive territories, Catholic piety, and fierce rivalry with the Valois monarchs of France forced him to fight on every front.

The Ottomans Attack Rhodes

The Ottoman Empire reached the peak of its power in the sixteenth century. The Ottoman armies defeated the Safavids, capturing the Safavid capital Tabriz and establishing a more effective control over the silk and spice routes after 1514. The capture of Syria and Egypt in 1516 and 1517, respectively, strengthened the Ottoman position in the East as well as increasing the wealth and economic power of the Empire.⁸ The continued occupation of Rhodes

by the Knights of Saint John, who regularly attacked merchant ships and harbored pirates and corsairs, was clearly undesirable for the Ottomans.

The Ottoman decision to conquer the islands directly on the Mediterranean trade routes was a strategic move to secure control over maritime trade. In addition, the opening of the route around Africa and the establishment of Portuguese strongholds in India were developments that demanded firmer control over the area still under Ottoman rule. Now that some oriental products reached Europe through a different, more direct channel, all possible areas of trouble within the Ottoman sphere had to be eliminated. Therefore, capture of the Christian stronghold on Rhodes, lying nearly astride the route between the ports of Alexandria and Constantinople became a priority for attack by the Ottomans.

Suleyman I (the Magnificent) attacked Rhodes in 1522, and after an epic siege the survivors surrendered on December 18, 1522. Suleyman agreed to let the Knights depart and gave them twelve days to withdraw from Rhodes.⁹ The definitive evacuation of the island took place on January 1, 1523. Fifty vessels loaded with Knights, auxillary troops, those injured during the siege, and about 5,000 Rhodians and their belongings sailed away from the island. The 'Grand Carrack' that carried the Grandmaster Villiers d'Isle Adam and other high officials also had the sick and injured on board, and was loaded with the valuables of the Order.¹⁰ This last-minute departure was more like an escape since time was running out: the carrack had to cut its anchor cables and leave two large anchors behind.¹¹

Charles V Does Not Support the Order to Recover Rhodes

The Knights of Saint John initially hoped to find support from European powers and take Rhodes back from the Ottomans, and in the years following 1523 attempts were made to arrange an uprising in Rhodes that would facilitate re-occupation of the island.¹² Another opportunity to re-conquer Rhodes arose between 1523 and 1524 when the rebellion of Ahmet Pasha in Egypt disrupted Ottoman rule. There is evidence that L'Isle Adam was conspiring to re-conquer Rhodes by siding with Ahmet Pasha in the internal struggles of the Ottoman Empire in 1525, with the objective of getting Rhodes back in return for employing his forces against Mustafa Pasha.¹³ No European power was inclined to provide military or financial support to the Order to accomplish its goal; Europeans had enough trouble of their own without initiating another confrontation with the Ottomans.

After they finally put down the revolt in Egypt, the Ottomans concentrated on meeting a Portuguese threat to the holy cities of Islam. In 1525 the Portuguese attacked Jidda, the port of Mecca. Defense of this religiously significant part was of crucial importance to the Empire, but once the Portuguese threat in the east was taken care of, the Ottomans struck again in the west. In 1526, three years after the fall of Rhodes, Ottoman armies invaded Hungary. Louis II Jagiello of Hungary and Bohemia was killed in the Battle of Mohacs, and the Holy Roman Emperor Charles V's brother Ferdinand was elected his successor. Different opinions about this succession led to civil war. Trouble continued in Hungary, and in 1529 the Ottomans laid siege to Vienna. There were also developments in the Mediterranean. Kheireddin Barbarossa was not formally representing the Ottomans when he captured Algiers in 1530, but the event was viewed as an alarming Muslim advance.¹⁴

Other important developments of this period were the defeat of the French under Francis I by the imperial army of Charles V and Charles of Bourbon at the Battle of Pavia in 1525. Francis I eventually signed the Treaty of Madrid in 1526 renouncing all French claims to Italy, Burgundy and Flanders. Charles of Bourbon was subsequently given an army to invade northern Italy on behalf of Charles V but, the Holy Roman Emperor provided no funds to support the expedition. Consequently, in 1527 Bourbon's army ravaged northern Italy in search of loot and then sacked Rome, laying siege for eight months to Castel Sant'Angelo where the Pope himself had taken refuge. Charles V apologized for the incident and was forgiven by the Pope, but in the meantime Henry VIII, King of England, had begun petitioning the Pope in 1525 for the annulment of his marriage to Charles V's cousin, Catherine of Aragon. England soon joined the other regions of Northern Europe that had broken with the Catholic Church.

In short, during the years that the Order of Saint John courted European monarchs for a combined effort to recover Rhodes or be granted a new base in the Mediterranean, its problem was the least of the Holy Roman Emperor's worries.

Consequences of Losing the Sovereign State

After its military defeat at Rhodes the Order had to survive numerous political defeats in the years to come. For eight years after its expulsion from Rhodes, the Order of Saint John was homeless, and it seemed at times as if, like the Templars and the Teutonic Order, it was destined to break up and disappear.¹⁵ Being without a base for an extended time was a situation threatening the very existence of the Knights. Thus, Grandmaster L'Isle Adam began to travel around Europe to solicit help. But in addition to the relative unimportance of the subject in the political agenda of the times, the European courts at the height of the renaissance were also convinced that the Order was an anachronism of the medieval era and should be allowed to

expire.¹⁶ Seeking a new base to call their own, the Knights requested peninsulas in Sicily, the sizeable islands of Corsica, Sardinia and even Minorca, Ibiza, and Ischia. They even considered the islands of Elba, Heres and Ponza, which are all smaller than Malta but could function practically as peninsulas off Italy. Other options included the port of Sued on the northern coast of Crete, or Cerigo, the southernmost Ionian island in the Aegean Sea.¹⁷

But settling the Knights of Saint John on territory close to major European commercial centers and routes was not a viable proposition. During their occupation of Rhodes, the Order became increasingly involved in piracy, partly as a result of its policy of increasing the power of its fleet by attracting pirates to form a numerical deterrent to Ottoman reprisals.¹⁸ Christian pirates frequented Rhodes and it was impossible to check this activity without decreasing a principal source of wealth. The Knights became well-known as the foremost privateers of the eastern Mediterranean, and Rhodian piracy was not confined to Muslim ships and states. The reality was that by this time most European nations were trading with the Muslims: the Ottomans controlled trade routes from India and China, and Mediterranean commerce became inconceivable without Muslim involvement.¹⁹ Intensification of trade increased both the number and wealth of European merchants involved in oriental trade, and these individuals often held important political positions in European society.²⁰ Maintenance of fragile relationships between Muslim and Christian merchants was of crucial importance, and the Order's attacks upon merchant shipping were violently protested by the European cities and countries that traded with the Ottoman Empire and the North African coast.²¹ Venice, for example, was consciously avoiding confrontation with the Ottomans, and was reluctant to join naval leagues against them, because continuation of its Levantine commerce was conditional upon peace with the sultans.²² Venetians regularly complained that pirates of Rhodes and the ships of the Order had attacked their ships under the pretext of preventing commerce with Muslim countries in the years 1502-

1504.²³ Fifteen years later, Anconitans, Florentines, Ragusans, and even Genoese added their complaints to those of the Venetians detailing the omnipresent threat of pirates based in Rhodes.²⁴

The policy of encouraging piracy as a defensive measure seemingly turned against the Knights and hastened the fall of Rhodes by bringing Suleyman the Magnificent to the island to expel the Order. Furthermore, after the fall of Rhodes, no European power wished to concede sovereign territory to the Order and thereby have a pirate base close to its routes of commerce. The Order's support of piracy had also hurt Christian merchants on enough occasions to place them in an untenable political position during this period.²⁵ Thus, after eight years of searching, the only offer for a new base was that of Charles V: the Knights could have the Maltese Islands and a castle in Tripoli. The Grandmaster had run out of time to find a better option, and time was vital, for delays in establishing the Knights in a new base threatened the ability of the Order to hold onto its European estates, the backbone of the organization.

Organization of the Order and European Territories

The fall of Rhodes was a crucial turning point in the history of the Order of Saint John, for it almost brought the whole organization to an end. The gravity of the situation lay in the fact that there was no justification for European powers to support the Order, especially now that it could not perform its military function in the absence of a strategically located base. There was no way the Order could continue its existence without support from European royalty, as the foundation of its finances lay in the preservation of economically-viable estates in Europe (Fig. 23).

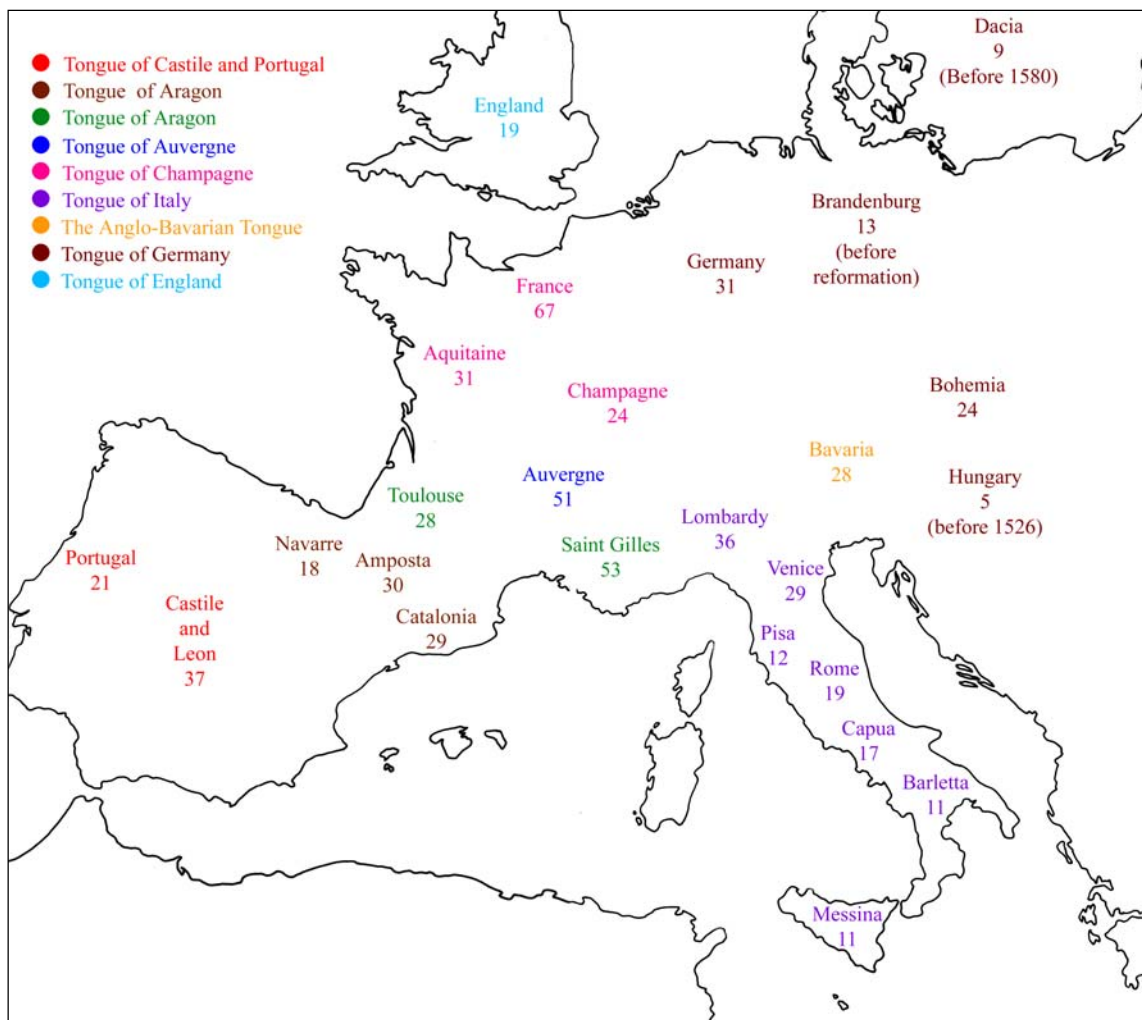


Fig. 23. Distribution of the European Commanderies of the Order of Saint John. Numbers indicate the total of 'commanderies' in each region. The information used to compile this map does not indicate precise periods but is largely valid for the period between 1550 and 1750. (Map: author, based on H.J.A. Sire, *The Knights of Malta* (London, 1994), pp. 112-206).

The political organization and the economic structure of the Order were interconnected. The Grandmaster was elected for life and his election was subject to papal confirmation. Although there were three main groups (Knights, chaplains and serving brothers) only the Knights had a voice in the government of the Order, the Chapter General. The Knights were grouped into *Langues* (tongues). There were originally seven *Langues*: Provence, Auvergne, France, Italy, Spain (later breaking up into Castile and Aragon), England, and Germany.²⁶ Each

Langue was responsible for the defense of one sector of the fortifications and had its own *auberge* where its members messes and lodged. Each *Langue* had a head, known as the *pillar*, and was allocated one of the major offices of the Order in which to perform its basic functions. The *pillar* of France was the Grand Hospitaller; the *pillar* of Castile was the Grand Chancellor; the *pillar* of Provence the Grand Commander with charge of the treasury; and the *pillar* of Italy was the Grand Admiral. The *pillar* of England held the important command of the coastal defenses until the cancellation of this *langue*.

The considerable estates of the Order belonged to the *Langues* of the country in which they were situated, and were graded according to size and importance into *commanderies*, *priories* and *bailiwicks* under commanders, priors and bailiffs, respectively. National or territorial groups of priories and other units were termed grand priories, and the grand priors were members of the Chapter General. Each unit contributed at least one-third of its revenues, known as the *responsions*, to the upkeep of the armed forces, hospital, and other activities of the Order in Malta.²⁷ This income was absolutely vital to the Order's existence. However, since the lands from which these revenues arose were scattered all over Europe, the Order depended on the goodwill of European sovereigns for its continued ownership of the lands.²⁸ For example, one of the first actions of Henry VIII, after leaving the Roman Catholic Church, was to seize the lands of the Order in England in 1540, and the threat that other sovereigns might follow suit was a powerful diplomatic weapon, exploited adroitly by the Republic of Venice in its dealings with the Knights of Saint John.²⁹ Another example that illustrates the fragile balance upon which the Order depended was the crisis with Portugal. Shortly after the fall of Rhodes, the King of Portugal, Joao III, threatened to seize all the property that belonged to the Order in his country unless his candidate was appointed Commander.³⁰ The second major income source was the *droits de passage* (the induction fee) paid by the new Knights.³¹ This source of income was also

threatened, since the induction of novices was interrupted by the loss of Rhodes. Therefore, finding a new base as quickly as possible was indispensable for the Order.

The Grandmaster Accepts Charles V's Offer

Already stripped of its estates and possessions in Protestant lands, the Order now depended on the good will of Catholic rulers if it were to succeed in preserving the remaining European properties which supplied the financial underpinning for the whole organization. In 1524 Charles V offered the Knights the three small islands of the Maltese Archipelago provided they aided him in securing the fortress at Tripoli.³² Malta was a safe distance from Europe but close to the Barbary Coast. Charles V also introduced a new set of rules to keep the Knights under very strict control. Unlike their unchecked freedom in Rhodes, in Malta the Knights were not only vassals of the King of Spain, but they were forced to renew their homage via the King of Sicily every year. In addition, Charles V employed the Order's naval force for all his ventures to Africa, and the Knights had to fight in Spanish ranks in combat against the Ottomans. Although fighting against the infidels was their *raison d'être*, they were now compelled to do so, not at their convenience or on religious grounds, but due to the economic needs of other rulers, and under the command of the Spanish during the actual fighting.³³

Even though they were in a distressed state, the Knights did not accept the offer immediately. The first commission sent by the Grandmaster in 1524 to report on Malta's potential as a base concluded that Malta had three fundamental disadvantages: food had to be imported, the existing fortifications were old and in need of repair, and the local population was not large enough to provide an adequate defense force.³⁴

The island's proximity to 'enemy' territory, rendering possible the continuation of the statutory holy war; its spacious harbors; and its conveniently safe distance from the Catholic mainland, safeguarding the Order's autonomy and neutrality without involving it in too

many international complications – all must have favorably counterbalanced in Grandmaster L'Isle Adam's view the island's military, political and economic liabilities: the poor quality of the soil, the meager yields of its Crown lands, its dependence for continuous food supplies and raw materials on Habsburg Sicily, the despicable state of the fortifications, and its repulsive exposure to Muslim corsair attacks.³⁵

Under the circumstances, the Knights of St John had no option but to accept Charles V's offer, for they had canvassed all the other rulers of Europe and had everywhere met with indifference, prevarication or blunt refusal.³⁶ When the Order finally arrived in Malta on October 26, 1530, the Knights took up residence in the harbor town of Birgu and the Grandmaster housed himself in *Castrum Maris*, renamed Fort Saint Angelo. After spending more than 400 years in the eastern Mediterranean, the Order of Saint John was given a new home in the west.

The Ships That Took Part in the Journey from Rhodes to Malta

January is a bad time to sail in the Mediterranean, but the winter of 1522-23 was exceptionally harsh.³⁷ The convoy that carried the Order from Rhodes consisted of ships of different tonnage and sizes and was, therefore, difficult to control. Already in disarray, it was hit by a storm en route to Crete, and even though their passengers were rescued, a few overloaded ships were lost entirely. When the convoy finally reached Crete after about ten days at sea almost everyone on board was sick or injured. Grandmaster L'Isle Adam decided to winter in Crete and establish a hospital to tend to the infirm. After the winter in Crete, the fleet continued its journey, arriving in Civitavecchia at the end of July 1523 as Pope Adrian VI offered them refuge and protection.³⁸ On June 15, 1527, the Order's ships were forced to move from their anchorage due to an outbreak of plague. They arrived in nearby Corneto, which proved to be equally unsafe. Eventually, the fleet was offered accommodation at Nice by Duke Charles III of Savoy.³⁹ The convoy anchored in Nice the same year, where it remained until the search for a

new base was concluded in 1530. No matter where the anchorage was, the ships themselves continued to be the home of those awaiting a permanent home (Fig. 24).



Fig. 24. Journey of the Order of Saint John during the years between their expulsion from Rhodes and arrival at Malta. (Map: author).

There is not much information regarding the specific ships forming this fleet. We know that it was comprised of three galleys – *Santa Maria (Capitana)*, *Santa Caterina*, *San Giovanni*, a number of sailing ships, including a galleon named *San Bonaventura*, a barque named *Perla*, and a few galleasses, light brigantines, felouques, small carracks, and two large carracks.⁴⁰ However, these ships became the symbol of this difficult period in the Order's history, and for that reason references to their specific details are encountered in the historical and iconographic record.

The largest ships in this fleet were two carracks (see Appendix B). The first was named *Santa Maria*, and it was already in the Order's possession when it departed from Rhodes. The second carrack, *Sant'Anna*, was launched in Nice at about the same time the Ottoman forces

ousted the Knights from Rhodes, and joined the other ships a few months after the beginning of the long journey. These two ships were the most impressive among the Order's naval forces. It was traditional that the largest vessel served as the flagship by carrying the Grandmaster and the highest-ranking members of the Order. The flagship came to symbolize the whole fleet and, eventually, this very grueling journey itself. Contemporary historians and future generations referred to it as the *Gran Carraca di Rodi* or *Gran Nave di Rodi*. The major difficulty for those of us who are interested in understanding the specific constructional details, size, tonnage, armament and rigging of this ship is the fact that the surviving information about the *Gran Carraca di Rodi* is possibly a mixture of descriptions of *Santa Maria* and *Sant'Anna* since the only largest ship of the fleet was *Santa Maria* until the arrival of *Sant'Anna*.

The second type of information concerning the ships of the Order in the sixteenth century consists of a few paintings tentatively dated to the late sixteenth and seventeenth centuries. There are seven paintings titled *Gran Caraca di Rodi* (Appendix B). However, only two of the paintings show ships that are datable to the sixteenth century in terms of their constructional features. With the exception of these two contemporary paintings, all other paintings titled *Gran Caraca di Rodi* date to the seventeenth and eighteenth centuries and display the ship from the same angle, with almost identical constructional and decorative features. These similarities suggest that all are copies of an original work that has not survived.⁴¹

To what extent can we accept these pictorial representations as trustworthy likeness of the ships of the time? In general, the iconographical evidence for the development of shipbuilding technology depends on visual representations in a variety of artistic media, in which the artists were often not concerned with presenting the ships in precise technical detail.⁴² The artist's objective was generally to create and present a visual expression of those characteristics that made an individual or a country 'great'. Although there was no need –or room– for accurate

rendering of the truth, it is possible that even the oddest features consistently represented on artwork reflected reality.⁴³ However, it is likely that this “reality” applies more to the seventeenth and eighteenth-century ships, which were contemporaneous with the painters, rather than to the sixteenth-century carracks that transported the Order of Saint John to Malta.

Perhaps the most significant problem with historical sources on the *Gran Caraca di Rodi* is that almost all surviving iconography and text are not contemporary with the ships themselves.⁴⁴ Therefore, we have reason to believe that the later, secondary writings and artistic renderings were exaggerated and somewhat fanciful descriptions of the *Carraca*.⁴⁵

It is also evident that seventeenth-century paintings showing a typical contemporary sailing ship were titled the *Gran Caraca di Rodi* (see Appendix B). Some modern historians took this as a sign that the Order of Saint John was “ahead of its time” and was already building advanced sailing ships in the sixteenth century.⁴⁶ The central problem is a general misconception about the size and nature of the Order’s navy. Most modern publications about the fleet of the Order reflect the view that it was a major European naval power comparable to those of England, France or Spain. It is also implied that the Order’s fleet was updated with technological advances in warfare and weaponry and already employed sailing warships in the sixteenth century. In fact, the Order not only used galleys effectively until the end of its rule in 1798, but also did not feel the need to have a fleet of sailing warships until the early eighteenth century.⁴⁷

The ship type known as the carrack developed in the late thirteenth or early fourteenth centuries, and became the preferred type as sailing warships and bulk carriers around the middle of the fourteenth century.⁴⁸ The armament of the fourteenth-century Mediterranean carrack fitted for war comprised crossbows, longbows, and possibly cannons.⁴⁹ How, when and where

the naval cannon was first used is not well known, but ships were definitely carrying guns by the early fifteenth century.⁵⁰ It was the introduction of the gunport in the early sixteenth century that enabled ships to carry more guns closer to the waterline.⁵¹ The increasing use of muzzle-loading cast bronze guns, replacing weaker wrought iron ordnance between the last quarter of the fifteenth century and the beginning of the sixteenth century, made cannon more powerful and reliable, thus more effective for naval use.⁵² Cast Iron guns appeared in the second half of the sixteenth century and would largely replace bronze ordnance in the sixteenth century.⁵³ Cast iron guns were heavier than bronze ones, and were more prone to burst, but they were cheaper weapons. Indeed, the distinctive differences in the construction of warships and merchantmen only became apparent after the mid-sixteenth century and changes in naval warfare tactics shortly followed.

During the period when the Order of Saint John had two carracks in its fleet, warships were still mostly merchantmen equipped with weapons and troops. The basic battle tactic consisted of approaching and grappling an enemy ship, boarding it, and fighting across the decks to slowly gain control. In the first three decades of the sixteenth century, there was a Europe-wide urge to construct the largest possible ships. The possession of a great ship became a matter of prestige for kings who demanded high, massive fore and after castles and extensive armament - size being more important than the fighting capabilities of the ship. Furthermore, these status symbols were built in response to the actions of other rulers rather than out of a desire to have an effective warship. Except for rare appearances in battle and in ceremonies, these symbols of power stayed well-guarded in their homeports.⁵⁴ Although there is no evidence that the Order shared this desire to build grandiose carracks, it is apparent from the tone of the historic record and the style of the paintings that the major role of the Order's carracks was to promote its power and strength. Especially during the turbulent period between 1523 and 1530, while going

through a test of survival, the Order had to promote its political and naval strength to prove to Europe that it could accomplish great deeds and continue to serve Europe, provided it could keep its financial resources and maintain its navy.

The carrack's inadequacy as a warship was quickly discovered, and its huge size made it an unlikely merchantman for Mediterranean trade, with the exception of the bulk trade in grain and alum. The Genoese, because of their specialized involvement in the alum trade, remained the only merchants who continued using carracks until the seventeenth century. The Order of Saint John disposed of the carracks soon after its arrival in Malta in favor of galleys, which were more suited to stealth and surprise raids.

Although the carracks used by the Order of Saint John must have been impressive vessels, there is almost no evidence to support that the vessels were in any way superior to other ships of the era. However, discrepancies in the sources provide information about the political situation during this period and show how rulers perceived the *Carrack* as a symbol of power. The case of the *Gran Caraca di Rodi* is a great example of ships as prestige objects, as political tools, as propaganda symbols, and as emblems of power. The actual shape, size and strength of the ship was of secondary importance; what mattered was the reputation that preceded it.

CHAPTER X

NAVAL ORGANIZATION OF THE ORDER OF SAINT JOHN

The general concept guiding the military and naval organization of the Order was known as the “shield and sword idea.”¹ The shield of the Order was the mighty fortifications built around its bases in Rhodes, Malta and all its other territories such as Cos, Halikarnassos and Tripoli. The “shield” was to repulse amphibious attacks and provide security to the center. The “sword,” on the other hand, was the relatively small but fast and efficient naval fleet. The limited number of actual vessels in this fleet required a higher level of fighting ability in its individual ships, commanders, officers and crews.² It was often reported that the galleys of Malta were the fastest, best-manned and best-equipped in the Mediterranean.³

Planning, provisioning, management, recruitment, and division of responsibilities within the navy were administered by two committees known as the *congregazioni*. High-ranking officers of the Order were elected to the *congregazioni*, and were given responsibility for all political, financial and administrative decisions involving ships of the Order.⁴ The first *congregazioni* was in charge of the galleys, and the second, instituted in the eighteenth century, managed the squadron of sailing warships, the *vascelli*.

The naval recruitment and rotation system, known as the *caravan*, required four six-month-long cruises for all new Knights before they could become full members of the Order.⁵ A young aristocrat from one of the eight *Langues* (nationalities) first had to be accepted by a priory in his homeland.⁶ After that, the young novice paid his ‘passage’ on the Order’s ships and arrived at the convent. Upon the completion of his novitiate, he would pronounce his religious profession of chastity, obedience and poverty, and receive the Order’s black habit with an octagonal white cross. Only after this stage could the novice begin performing his *caravans* to

study the art of navigation and naval combat as a soldier, head of artillery, naval officer or as galley captain if he were older than 25.⁷ The ultimate goal of all the members of the Order of Saint John was to obtain the right to a *commandery* in Europe.⁸

According to the constitution of the Order, certain government functions were reserved for certain *Langues*. Among these was the office of the admiral, reserved exclusively for the *Langue* of Italy. In practice, the admiral was the minister of the navy and did not lead the fleet. The Captain General, who was the actual fleet commander, did not have to be from Italy.⁹

This administrative framework supported the principal military muscle of the Order of Saint John, the galley squadron. Individual ships forming this squadron were no different from other galleys operating in the Mediterranean under both Christian and Muslim flags at the time.¹⁰ Therefore, the following sections will include only general characteristics of the ships, and will not investigate their constructional details as, firstly, such information is not available for the Maltese galleys and, secondly, the so-called ‘Maltese galleys’ were built mostly in France. The amount of technical information relating to the galleys is immense and, therefore, cannot be included in this discussion. Furthermore, the major reason for the successes and failures of the Order’s fleet was related less to the performance of the vessels, than to changes in the greater scheme of political, economic and military developments.

The Galley Squadron

In 1530, the Order of Saint John sailed to its new base on Malta with three galleys, two carracks, one ship referred to as a ‘galleon’ in historical sources, and a few brigantines.¹¹ The three galleys, *Santa Maria (Capitana)*, *Santa Caterina*, and *San Giovanni*, formed the entire naval force of the Order at the time, as the rest of the ships were transports. Even the vessels armed with cannon (i.e., the carracks) were not part of the naval squadron but were transport

ships capable of defending themselves. The preferred warship of the Order of Saint John was the galley, a type of vessel that dominated warfare at sea in the Mediterranean from the Bronze Age to the end of the sixteenth century. The reasons for the widespread employment of galleys as warships are complex and will not be discussed here in detail.¹² Briefly stated, the major reason for the success of the oared ship in seas like the Mediterranean and the Baltic was its suitability for employment in coastal areas with variable winds. Its effectiveness in these conditions led to the development of a Mediterranean model of naval warfare, characterized by the close integration of naval operations, amphibious warfare and sieges, with very few full-scale battles in the open sea.¹³ The few spectacular naval battles of the sixteenth century were also far from producing decisive results. A galley fleet could be renewed in a few months, and the logistical limitations of galleys prohibited the strategic exploitation of the victory. Only two years after their disastrous defeat at Lepanto, Ottoman galleys were raiding the Apulian coast with a force that amounted to 200 ships. The temporary and localized maritime control galleys provided could not be maintained for extended periods, providing tactical but not strategic results.¹⁴

A galley could be used efficiently for about six to eight years and generally was not an effective weapon unless there were at least a few of them operating together.¹⁵ Due to these two facts, thousands of galleys were built in arsenals around the Mediterranean from antiquity to the eighteenth century. Developments in galley technology and design were gradually adopted, copied, improved, and shared by all societies having to maintain their naval power. There were slight variations in the characteristics of galleys built in different arsenals, but the differences between galleys of different centuries are more distinctive than the differences between vessels of different nationalities. A galley built in Malta upon the request of the Order of Saint John was almost identical to a galley built in Marseilles or Venice at about the same time, except maybe in

its decoration.¹⁶ Frequent naval encounters of small and large scale, and fights against pirates and privateers necessitated the construction of thousands of galleys to serve in the great squadrons of Venice, Spain, France, and the Ottoman Empire, as well as the smaller squadrons maintained by Genoa, Florence, Naples, the Kingdom of Two Sicilies, and the Order of Saint John.¹⁷ Large arsenals such as Venice, Marseilles and Constantinople produced the majority of the galleys during the age of galley warfare.

The Order of Saint John was a steady customer of the first two large shipbuilding centers. Not only the *Capitana* and the ordinary galleys of the squadron, but also the ‘magistral’ galleys built and armed by the Grandmaster, at his own expense, were frequently built in European yards.

Types of Ships Forming the Galley Squadron

‘*Capitana*’ was the term used to define the largest and most prestigious ship of the squadron, which carried the commander of the squadron.¹⁸ This flagship generally had 28 to 30 oars on each side and two or three lateen-rigged masts for cruises under sail.¹⁹ The unusually large and high stern cabin (*carosse*) and the fact that it was the only ship in the squadron painted red were the most distinctive characteristics of the *Capitana*.²⁰

The late-eighteenth-century Swedish naval architect Fredrik af Chapman provides information about the specific features of a *Capitana* of the Order of Saint John (Fig. 25).²¹ This information is summarized in Table 1.

TABLE 1.
Measurements of a typical Maltese *Capitana*

Length between perpendiculars	184 ft (56.08 m)	
Breadth moulded	24 5/6 ft (7.56 m)	
Draught	8 ½ ft (2.6 m)	
Guns	5	(2) 8-pounders on the deck (2) 6-pounders on the deck (1) 36-pounders on the forecastle
	(18) Swivel guns (18) Musquetoons	
Pairs of oars	30	5 men to each oar

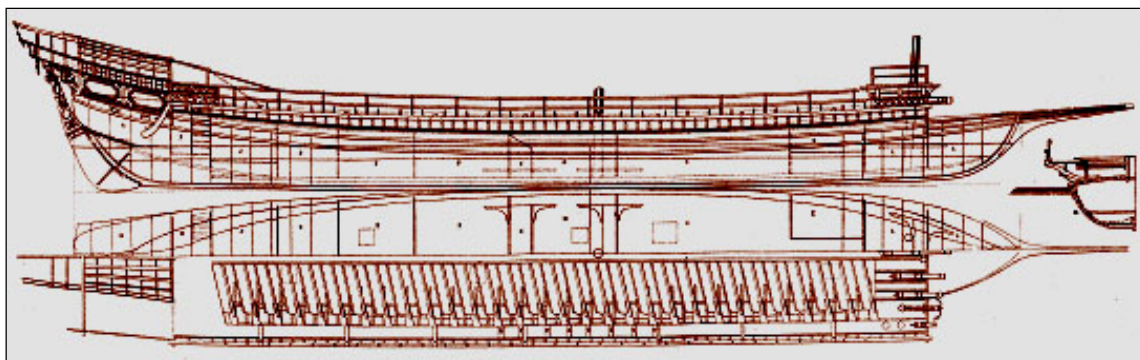


Fig. 25. Lines and construction plans of the *Capitana* from the Order of Saint John's fleet by Chapman. (After: Chapman).

The *Padrona* was the second ship in command, with its 27 oars on each side.²² After these two larger types came the ordinary galleys, with their 26 oars per side.²³ The area directly abaft the bow of the galley was reserved for the five guns, the major armament of the vessel. The *carosse* was reserved for the captain and the Knights. The *ciurma* or rowing force of about 250 included Muslim slaves, the free rowers known as *bonavoglia*, and convicts. It was typical for a galley to cruise under sail and limit the employment of the *ciurma* to the occasional chase, escape or maneuvering to board an opponent.²⁴

The galley squadron also included smaller ships with a maximum of eighteen benches on each side called *galleots*.²⁵ A *galleot* can best be described as the smaller and faster version of a galley that carried one lateen-rigged mast, one gun, heavy muskets, and *perriers*.²⁶ Due to its small size, the *galleot* could only carry small quantities of provisions and munitions, limiting its operational range considerably.²⁷ The *galleot* was popular among the private corsairs that carried the Order's flag, but also appeared in the squadron on occasion to be used for reconnaissance missions and as a messenger ship.²⁸

As the Order's financial situation declined in the eighteenth century, *galleots* became more common in the squadron, replacing the ordinary galleys that were now harder to afford. In July 1741, Grandmaster Manuel Pinto de Fonseca provided funds for the construction of two *galleots* and a *tartana* to fight the Muslim ships of the Barbary Coast.²⁹ By 1764 the same Grandmaster was paying for the maintenance of three *galleots*: the flagship *Santa Caterina* with a crew of 151 commanded by Francesco di Natale, *Santa Maria di Filermo* with a crew of 136 commanded by Simeone Gavasso, and the *Sant' Orsula* under the command of Pietro Zelalix with a crew of 142.³⁰ Corsair *galleots* with private owners carried a smaller crew than those in the service of the Grandmaster. For example, a typical *galleot* of 15 benches commanded by Angelo Santo Nicolai was contracted in 1722 to be a privateer flying the flag of the Order, with its crew of only 67 working as rowers, sailors, and soldiers.³¹ Additional information about the sizes of *galleot* crews comes from documents related to another incident of 1722. The galley squadron captured a *galleot* in this year, which was renamed *L'Immacolata Concezione* and sold in Malta to a Captain Tomaso Alferano. On February 10, 1722, Alferano received permission to join the *corso* and use the Order's flag to attack Muslim shipping, despite the fact that his *galleot* had a crew of only 38.³²

Two types of oared vessels even smaller than the *galleot* were introduced in the eighteenth century in another attempt by the Order to reduce the deficit on the annual navy balance sheet. The demi-galley (*mezzagalera*) was a smaller version of the *galleot* with a reduced crew. Its introduction in 1742 coincides with a period of economic difficulties, during which the Order experienced serious problems in procuring Muslim rowers due to a sudden drop in the number of prizes.³³ The first two demi-galleys, *Sant Anna* and *Sant Ursola*, were launched in 1742 and added to the galley squadron.³⁴ The demi-galley was known as a fast vessel with 14 oars on each side, three guns, two lateen-rigged masts, and a crew of 200.³⁵

The second, type of shortened galley, with 24 benches to each side, was introduced in 1791, but Napoleon's capture of Malta in 1798 rendered its beneficial impact on the treasury irrelevant.³⁶ It is likely that there were problems with the 24-bench design that caused the idea to be abandoned even before the arrival of the French forces, as no vessels of this type are listed among the ships taken over by the French in 1798.³⁷

The last type of vessel introduced in the eighteenth century was a hybrid known as the *chebec* or *xebec*. A North African invention designed as a fast sailer and a capacious cargo ship, it had three lateen-rigged masts, but could be rowed to maneuver the ship into an anchorage or for corsairing activities.³⁸ It was also heavily armed and used by Muslim corsairs, and the success of the vessel led the Christian merchants and corsairs to adopt the design.³⁹ The gunports were placed between the oarports.⁴⁰ The first *chebec* of the Order was built in Malta in 1743 to carry provisions from Syracuse and Augusta.⁴¹ In 1754 the Grandmaster appointed four commissioners to investigate the possibility of assigning two *chebecs* to guard Grand Harbor. The reason for this proposal was the cheaper maintenance cost for these ships and the fact that they could also be used to transport provisions from Sicily. The project was approved by the

Grandmaster and *San Pietro* and *San Paolo* were built.⁴² Later in the century a third *chebec*, *Spirito Santo*, was added to this force.⁴³

The size of the *chebec*'s crew depended on the size of the vessel. Smaller *chebecs* of 10 to 60 tons burden carried crews numbering between six and eleven, while the larger versions over 100 tons had crews of 14 to 25 (Fig. 26).⁴⁴ The particulars of a typical armed *chebec* are provided in Table 2.⁴⁵

TABLE 2.
Measurements of a typical Maltese *chebec*

Length between perpendiculars	130 $\frac{1}{2}$ ft (39.7 m)	
Breadth moulded	25 $\frac{1}{4}$ ft (7.7 m)	
Draught	9 $\frac{2}{3}$ ft (2.8 m)	
Guns	28	(16) 6-pounders on the deck (4) 12-pounders on the forecastle (8) 3-pounders on the quarterdeck
	(30) Musquetoons	
Pairs of oars	9	

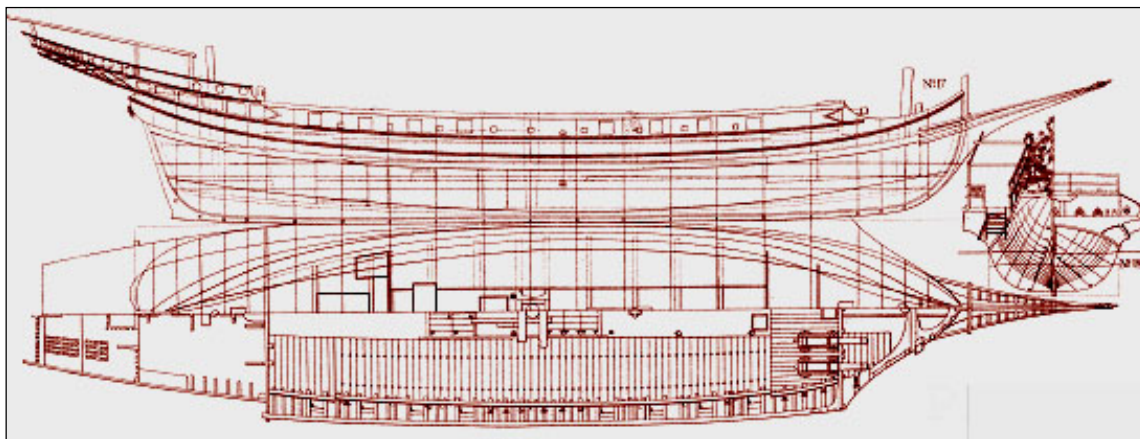


Fig. 26. Drawing of a *chebec* by Chapman. (After: Chapman).

Another vessel of Muslim origin, the *petacchio*, first appeared among the Order's ships in 1626.⁴⁶ The vessel was used widely in the eastern Mediterranean and North Africa.⁴⁷ In its profile and general appearance the *petacchio* was similar to a small galleot and it was armed with eight to ten small guns.⁴⁸

All of the types mentioned above carried a small oared boat called a *caique* or a *fregatina*, or both. The *caique* was used to transport the crew, water and other supplies as well as to tow larger galleys in narrow passages or anchorages. It could also be armed to attack land fortifications. *Fregatina* was mostly reserved for the service of the captain and Knights and to carry messages.

Size of the Fleet

The number of galleys in the squadron of the Order varied considerably depending on the period. Table 3 provides a list of specific historical accounts that include clear references to the number of galleys that formed the squadron at specific times throughout its existence. To summarize the information presented in the table, it seems clear the squadron of three galleys that left Rhodes in 1522 arrived safely to Malta in 1530. Information about this period is ambiguous. Bosio mentions that the number of galleys that reached Malta in 1530 was three,

and only two galleys were available a year later during the unsuccessful attempt to capture Modon.⁴⁹ It seems certain that the number of galleys had increased to four by 1532, and that the Order operated four galleys for the next 26 years. In 1558 the number was increased to five. This number did not change, with the exception of one occasion in 1564 when it again dropped to four.⁵⁰ The galley squadron reached its maximum size of nine in 1565. The enlargement was part of preparations for an anticipated Ottoman siege, which actually took place in the same year. There is little information about the fate of these galleys. What is certain is that while the Ottoman siege failed to capture Malta, it caused great damage to the existing structures and fortifications. Furthermore, the Order, realizing the weakness of its defenses, initiated a great construction program of fortifications.⁵¹ With all of the additional expenses for construction and repairs in the aftermath of the Ottoman siege, the Order had to reduce its galley squadron to four. Even that low number was difficult for the Order to maintain in its weakened state during the two decades following the siege. During the battle of Lepanto in 1571, it was only represented by three galleys in the Holy League's fleet of 207 galleys opposing an Ottoman fleet of 230 galleys.

TABLE 3.
Number of galleys comprising the galley squadron of the Order throughout its existence in Malta (1530-1798)

Date	Description	Number of galleys	Details	Source
1523	The fleet that left Rhodes	3	Three Galleys: <i>Santa Maria (Capitana)</i> , <i>Santa Caterina</i> , <i>San Giovanni</i> , + Sailing ships: <i>La Gran Nave</i> , <i>San Bonaventura</i> (Galleon), <i>Perla</i> (barque)	Rossi, <i>Storia della marina</i> , pp. 31-32.
October 26, 1530	The fleet that arrived to Malta	3 or 5	According to Bosio there were three galleys: <i>Santa Croce</i> , <i>San Filippo</i> and <i>San Giovanni</i> . Rossi mentions five galleys: <i>Santa Maria (Capitana)</i> , <i>Santa Caterina</i> , <i>San Giovanni</i> , + two new galleys built in Villefranche, <i>San Filippo</i> and <i>San Giacomo</i> + Carracks <i>Santa Maria</i> and <i>Sant'Anna</i> , a ship called <i>La Marietta</i> , three barciotti, one transport ship, two brigantines, 700 soldiers	Rossi, <i>Storia della marina</i> , pp. 33-34; Bosio, <i>Histoire des Chevaliers</i> , 10.9.297.
August 8, 1532	Order's squadron contributes galleys to the allied Christian force (that Charles V's Papal fleet under Andrea Doria's command) captured Coron	4	The great carrack and four galleys – Commander: Bernardo Salviati	Vertot, <i>The History</i> , 2: 54-55; Brockman, <i>Last Bastion</i> , p. 172.
June 1535	Invasion of Tunis	4	The Order provided four galleys and the carrack <i>Sant'Anna</i> to support Charles V's armada of 400 ships and 30,000 men to capture Tunis, recently taken from its former ruler, Mullah Hasan by the famous corsair, Khairaddin Barbarossa	Vertot, <i>The History</i> , 2: 63-72; Bono, "Naval Exploits," p. 353.

TABLE 3. — *Continued*

Date	Description	Number of galleys	Details	Source
1541	Siege of Algiers	4	The Order provided 400 Knights and four galleys to support Charles V's unsuccessful expedition to Algiers that resulted in the death of 75 Knights and 400 soldiers from the Order's forces. The papal fleet lost 15 galleys and 86 vessels. In addition, while the bulk of the Order's military forces were in Africa, Muslim corsairs attacked the island of Gozo, capturing inhabitants.	Vertot, <i>The History</i> , 2: 86-90.
1545	Sack of the small village, Almaia or Lmaia, to the west of Tripoli.	4	Four galleys under the command of Fra Signorino Gattinara	Bosio, <i>Histoire des Chevaliers</i> , 13.1.373; Bono, "Naval Exploits," p. 382.
1550	Capture of Monastir and Mahdiya (both in Tunisia) by an allied Christian fleet led by Charles V.	4	The Order contributed four galleys under the command of Fra Claude de Sengle to the fleet of 54 galleys under the command of Andrea Doria. 36 Knights died during the battle in Mahdiya.	Rossi, <i>Storia della marina</i> , p. 42; Bono, "Naval Exploits," p. 354.
1552	Unsuccessful attack on Zuara, a small town to the west of Tripoli, attacked as part of a larger expedition aiming to re-conquer Tripoli.	4	Four galleys: <i>S. Claudio</i> , <i>S. Michele Arcangelo</i> , <i>S. Maria Magdalena</i> , <i>S. Giovanni Battista</i> + a galliot, a <i>fusta</i> , brigantines and frigates under the command of Leone Strozzi	Bosio, <i>Histoire des Chevaliers</i> , 14.2.417; Rossi, <i>Storia della marina</i> , pp. 42-43; Mori Ubaldini, <i>La marina</i> , pp. 178-80; Bono, "Naval Exploits," p. 354.
1558	Standing fleet of the Order consists of five galleys and two galleons	5		Dauber, <i>Die Marine</i> , p. 115.

TABLE 3. — *Continued*

Date	Description	Number of galleys	Details	Source
1559-1560	Order's galleys took part in an expedition against Djerba, led by Philip II.	5	The Order contributed five galleys, two galleons, one <i>magistral</i> galliot and other minor craft under the command of Carlo Tessieres + 400 Knights and 900 soldiers. Total number of Christian ships: 49-54 galleys. 28 of these galleys and all the smaller ships were lost, as well as thousands of men. Order's galleys returned but two had suffered serious damage.	Rossi, <i>Storia della marina</i> , pp. 45-46; Mori Ubaldini, <i>La marina</i> , p. 202-6; Bono, "Naval Exploits," p. 355.
1564	Order's galleys participated in the conquest of Peñón de Velez.	4		Rossi, <i>Storia della marina</i> , pp. 43, 46-7; Mori Ubaldini, <i>La marina</i> , pp. 182-3, 215-7; Bono, "Naval Exploits," p. 357.
1565	The number of galleys increased to nine with the addition of the <i>Magistral</i> galley as part of the preparations before the Ottoman siege.	9		Dauber, <i>Die Marine</i> , p. 115.
1568	The number of galleys reduced to four	4	Legislative measures enacted in 1568 prohibited the construction of <i>magistral</i> galleys.	Bono, "Naval Exploits," p. 379; Dauber, <i>Die Marine</i> , p. 115.

TABLE 3.— *Continued*

Date	Description	Number of galleys	Details	Source
1569 or 1570	The squadron was attacked. Three galleys including the <i>Capitana</i> , <i>San Giovanni</i> and <i>San'Anna</i> were captured by the Algerians under the command of a Calabrian renegade Luca Galeni (Uluch Ali or Occhiali or Lucciali).	4	The <i>Capitana</i> , and the two galleys <i>San Giovanni</i> and <i>San'Anna</i> were lost together with hundreds of fighting men (killed or carried away to Algiers). The only survivor was the <i>Padrona, Santa Maria della Vittoria</i> .	Wismayer, <i>The Fleet</i> , p. 16. Bosio, <i>Histoire des Chevaliers</i> , 617; about the punishment of Saint Clemens Brockman, <i>Last Bastion</i> , p. 173; Dauber, <i>Die Marine</i> , p. 116. Bono, "Naval Exploits," p. 379.
1571	The naval battle at Lepanto	3	The Order contributed only three galleys, <i>S. Maria della Vittoria</i> , <i>S. Giovanni</i> , <i>S. Pietro</i> to the Holy league's fleet of 207 galleys and six galleasses against an Ottoman force of 230 galleys and 70 galliots.	For the Maltese ships etc. see, Bono, "Naval Exploits," p. 357.
1575-1577	The renowned corsair Romegas (Maturin de Lescaut) becomes the Captain General of the galley squadron	4	Squadron consists of four galleys.	Rossi, <i>Storia della marina</i> , p. 51.
1582	Grandmaster Verdalle fits out one 'private' galley with papal approval.	6	In addition to the four galleys of the squadron there is a galley belonging to the Knight Guinucci. With the addition of the <i>magistral</i> galley the number is increased to six.	Bono, "Naval Exploits," p. 379; Dauber, <i>Die Marine</i> , p. 116.

TABLE 3. — *Continued*

Date	Description	Number of galleys	Details	Source
1584	The Venerable Council of the Order decided that the galley squadron was to maintain a fighting strength of five galleys	5		Rossi, <i>Storia della marina</i> , p. 53.
1600-1602	Six Muslim ships were captured during the regular patrol cruise of the squadron.	5	Order's squadron under the command of Giacomo du Blot Viviers was supported by other ships from Naples, Sicily and Genoa.	Rossi, <i>Storia della marina</i> , pp. 59, 62.
1601	Attack on Castelnuovo (Morea)	4	Order's squadron under the command of Giacomo du Blot Viviers joined a Christian force consisting of ships from Naples, Sicily, Savoy, Florence, Genoa, and Papal vessels.	Rossi, <i>Storia della marina</i> , p. 59.
1602	Sack of Hammamet	5	Five galleys under the command of Giacomo du Blot Viviers	Rossi, <i>Storia della marina</i> , p. 59. Vertot, <i>The History</i> , 2: 60.
May 5, 1603	Attack and capture of Patras and Lepanto	4-5	The Order provided four or five galleys to support an allied fleet of Naples, Sicily and Genoa.	Wismayer, <i>The Fleet</i> , p. 6; Dauber, <i>Die Marine</i> , p. 116; Rossi, <i>Storia della marina</i> , p. 62.
1604	Attack on La Goletta	5	Three galleys were lost during the expedition.	Dauber, <i>Die Marine</i> , p. 116.

TABLE 3. — *Continued*

Date	Description	Number of galleys	Details	Source
April 1606	Devastating storm wrecks three galleys off Tunis.	5	<i>Capitana</i> , <i>San Michele</i> , and <i>San Giorgio</i> were wrecked. The other two galleys, the <i>Padrona</i> named <i>San Giacomo</i> and <i>San Luigi</i> managed to escape. 40 knights, 70 Maltese soldiers and 500 men were killed or taken prisoners in a subsequent Moorish attack and all the slaves escaped.	Dal Pozzo, <i>Historia della Sacra</i> , I: 507-515; Rossi, <i>Storia della marina</i> , pp. 60-62; Moni Ubaldini, <i>La marina</i> , pp. 326-330; Bono, "Naval Exploits," pp. 360-61.
1611	Attack on the Kerkenna Islands in the Gulf of Sirte.	5	Five Hospitaller galleys + 30 others from other Catholic allies	Bono, "Naval Exploits," p. 361.
1625	Sack of Santa Maura	5	Five galleys and four frigates under the command of Michele de Pontalier Tallamey	Rossi, <i>Storia della marina</i> , p. 65.
1624	Three Tunisian vessels captured near Zembalo	4	Order's squadron of four galleys participated with a squadron of ten galleys from Sicily	Bono, "Naval Exploits," p. 364; Rossi, <i>Storia della marina</i> , p. 65

TABLE 3. — *Continued*

Date	Description	Number of galleys	Details	Source
June 1625	Order's squadron under the command of Michele de Pontalier Tallamey is attacked by corsairs off Sicily (near Murro di Porco).	5	Two galleys, <i>San Francesco</i> and <i>San Giovanni</i> , were captured by the enemy and about 350 men were killed.	Dal Pozzo, <i>Historia della Sacra</i> , 1:739, Rossi, <i>Storia della marina</i> , p. 65; Mori Ubaldini, <i>La marina</i> , pp. 359-362; Dauber, <i>Die Marine</i> , p. 116; Muscat, "The Warships," p. 94.
1627	The strength of the squadron was increased to six galleys	6	Six galleys	AOM 256, f. 69r, 12 July 1627, AOM 1759, f. 322r, AOM 1760, f. 283r, in Grima, "Galley Replacements," p. 48.
August 1640	Attack on La Goletta and capture of six galleys from Kara Khogia (Caracoggia ?)	6	Squadron commanded by Lodovico Langravio d'Assia	Bono, "Naval Exploits," p. 364; Rossi, <i>Storia della marina</i> , pp. 67-68, AOM 257, ff. 56-57.
September 28, 1644	Capture of an Ottoman ship (referred to as <i>Sultana</i> in the records, also referred to as a <i>galleon</i>)	6	<i>Capitana</i> , <i>San Giovanni</i> , <i>San Giuseppe</i> , <i>Vittoria</i> , <i>San Lorenzo</i> and <i>Santa Maria</i> under the command of Captain-General Boisbodrart	AOM 1771 ff. 133-34; Wisniewski, <i>The Fleet</i> , pp. 54-59; Allen, "The Order of Saint John," p. 147.

TABLE 3. — *Continued*

Date	Description	Number of galleys	Details	Source
June 1625	Order's squadron under the command of Michele de Pontalier Tallamey is attacked by corsairs off Sicily (near Murro di Porco).	5	Two galleys, <i>San Francesco</i> and <i>San Giovanni</i> , were captured by the enemy and about 350 men were killed.	Dal Pozzo, <i>Historia della Sacra</i> , I:739, Rossi, <i>Storia della marina</i> , p. 65; Mori Ubaldini, <i>La marina</i> , pp. 359-362; Dauber, <i>Die Marine</i> , p. 116; Muscat, "The Warships," p. 94.
1627	The strength of the squadron was increased to six galleys	6	Six galleys	AOM 256, f. 69r, 12 July 1627, AOM 1759, f. 322r, AOM 1760, f. 283r, in Grima, "Galley Replacements," p. 48.
August 1640	Attack on La Goletta and capture of six galleys from Kara Khogia (Caracoggia?)	6	Squadron commanded by Lodovico Langravio d'Assia	Bono, "Naval Exploits," p. 364; Rossi, <i>Storia della marina</i> , pp. 67-68, AOM 257, ff. 56-57.
September 28, 1644	Capture of an Ottoman ship (referred to as <i>Sultana</i> in the records, also referred to as a <i>galleon</i>)	6	<i>Capitana</i> , <i>San Giovanni</i> , <i>San Giuseppe</i> , <i>Vittoria</i> , <i>San Lorenzo</i> and <i>Santa Maria</i> under the command of Captain-General Boisbodrart	AOM 1771 ff. 133-34; Wisniet, <i>The Fleet</i> , pp. 54-59; Allen, "The Order of Saint John," p. 147.

TABLE 3.— Continued

Date	Description	Number of galleys	Details	Source
Shortly after January 15, 1647	Capture of the Algerian 22-gun ship named <i>Bechar</i> Hoggia off Capo Passero	6	<i>Capitana, San Giovanni Padrona, Magistral, Santa Maria, Santa Caterina, and San Francesco</i>	AOM 1769 ff. 212-213. Wismayer, <i>The Fleet</i> , pp. 59-60; Dauber, <i>Die Marine</i> , p. 119.
1651	By the signature of the Grandmaster Jean de Lascanis the standing fleet is increased to seven galleys.	7	A new galley called <i>Lascara</i> is added.	AOM 117, ff. 138v-129v, 140v-141v, AOM 222, ff. 166v-167r, 2 and 7 October 1651, in Grima, "Galley Replacements," p. 48; Dauber, <i>Die Marine</i> , p. 119.
1652	In 1652 the Order had sent a squadron of seven galleys under the command of Bailiff Baldassar de Demandols to support Crete against an Ottoman siege.	7		Wismayer, <i>The Fleet</i> , p. 6. (no source is given)
June 26, 1656	Battle of the Dardanelles.	6	Attempt to blockade the Ottoman fleet in the Dardanelles to prevent it from reaching the Aegean Sea. Order's galleys were supporting a Venetian fleet of 24 galleys, seven galleasses and 28 sailing ships under the command of the Venetian Admiral Lorenzo Morocello	Bono, "Naval Exploits," pp. 366-67; Rossi, <i>Storia della marina</i> , pp. 72-73.

TABLE 3. — *Continued*

Date	Description	Number of galleys	Details	Source
January 25, 1661	Capture of a large ship in the Malta Channel (possibly between Malta and Sicily)	7	The squadron under the command of Fra Fabrizio Ruffo was returning to Malta from Crete.	AOM 1770 ff. 13-20. Wismayer, <i>The Fleet</i> , pp. 60-61.
1683	Surrender of Coron (War of Morea)	7	Order's squadron was supporting a Venetian fleet of 28 galleys, six galleasses, 24 sailing ships and other small craft. In addition, five galleys from the Papal states, and four from Tuscany were present.	Bono, "Naval Exploits," p. 369.
17 January 1701	Number of galleys reduced to six	6	A special commission appointed by Grandmaster Ramon Perellos y Roccaful instituted the new squadron of the third rate (sailing) ships, also taking the decision of reducing the number of galleys from eight to six.	Bono, "Naval Exploits," p. 381.
July 24, 1701	Capture of one Tunisian <i>garbo</i> four miles off Cartagena.	6	Captain-General Bailiff Spinola	Wismayer, <i>The Fleet</i> , p. 6. (AOM 1771 ff. 156-157).
August 17, 1701	Capture of a Tunisian <i>salentino</i> and an <i>ondro</i> , which were at anchor at the harbor of La Goletta.	6	<i>Capitana</i> , <i>Padrona</i> , <i>San Paolo</i> , <i>San Pietro</i> , <i>San Antonio</i> and the <i>Magistral</i> galley. Captain-General Bailiff Spinola	Wismayer, <i>The Fleet</i> , p. 6. (AOM 1771 ff. 156-157).
1704	Number of galleys reduced to five	5		Bono, "Naval Exploits," p. 381.
1716	Turkish war breaks out again and the Order's fleet is put into action. War ends with the peace of Passarowitz.	5	Fleet reduced to five galleys and two sailing ships	Dauber, <i>Die Marine</i> , p. 119.

TABLE 3.— *Continued*

Date	Description	Number of galleys	Details	Source
1720	Number of galleys reduced to four and the number of the sailing ships reduced to three due to an increasingly reduced number of prizes.	4		Bono, "Naval Exploits," p. 381; Rossi, <i>Storia della marina</i> , pp. 85-86.
June 29, 1748	During the slave revolt of this date the galley squadron had already left for the summer cruise around the Italian coast.	4	Galleys in the squadron: <i>Capitana</i> , <i>San Nicola</i> , <i>San Luigi</i> , and the Grandmaster's two galleots.	Lib 466 ff 1-212 in Wismayer, <i>The Fleet</i> , p. 102.
May 15, 1752	The squadron takes two Algerian <i>chebecs</i> off Cap Bon.	4		Lib 466 ff 1-212 in Wismayer, <i>The Fleet</i> , p. 102.
Jul 14, 1753	A French renegade contacted Grandmaster Pinto declaring his wish to return to his old faith and surrender the two Algerian <i>chebecs</i> that he had in his command. Order's squadron was sent to Monte Calabro (between Spain and Majorca).	4	Order's galleys suspected a trap and returned to Malta without meeting the corsair.	Lib 466 ff 1-212 in Wismayer, <i>The Fleet</i> , pp. 104-107.
1755 or 1756	Knights help the Bey of Tunis to defend himself against the Bey of Algiers	4	<i>Capitana</i> , <i>Magistral</i> , <i>San Luigi</i> , <i>San Nicola</i> , two ships of the line: <i>San Antonio</i> and <i>San Giovanni</i> (both 64 guns) under the command of Captain General Bailiff Fra De Rosset Fleury	Lib 466 ff 1-212 in Wismayer, <i>The Fleet</i> , pp. 108-112.

TABLE 3. — *Continued*

Date	Description	Number of galleys	Details	Source
1770	The three galleys joined a French fleet on its way to Tunisia. This combined fleet bombarded Sousse and Bizertia.	3	<i>Magistral</i> was under repair.	Lib 466 ff. 1-212 in Wismayer, <i>The Fleet</i> , p. 122.
1772	Only two of the galleys (the other two being disabled because they were old) went to Corsica and returned. Nothing was accomplished.	4		Lib 466 ff. 1-212 in Wismayer, <i>The Fleet</i> , pp. 122-123.
1774	A year characterized by the removal of coffee and chocolate from the officer's fare. Ration scale and the crew pay were also diminished.	4	<i>Capitana</i> (capt. Chevalier d'Hannorville), <i>Magistral</i> (capt. Chevalier De Roziers), <i>Padrona</i> (Chevalier Requeziens), <i>San Pietro</i> (capt. Chevalier Reario)	Wismayer, <i>The Fleet</i> , p. 125.
1798	Order's fleet captured by Napoleon upon his invasion of Malta.	2	Two galleys (<i>S. Luigi</i> and the <i>Magistral</i> galley <i>S. Nicola</i>), two demi galleys, two sailing ships (<i>San Zaccaria</i> and <i>San Giovanni</i> — later renamed <i>Dego</i> and <i>Berousse</i> in the French Navy), two frigates (<i>San Zaccaria</i> , <i>Santa Elisabetta</i> — renamed <i>Athenese</i> and <i>Cartaginese</i> in the French Navy).	Bono, "Naval Exploits," p. 377; Rossi, <i>Storia della marina</i> , pp. 93-94.

In 1584 the number of galleys was once again increased to five by decree of the Venerable Council of the Order of Saint John. Until the next increase in 1627, the squadron was maintained at five for the majority of its expeditions. There was another increase in 1651, bringing the number to seven and finally, with a decree of 1685, to eight.⁵² As will be discussed in detail in the section regarding financial aspects of galley construction, the major reason for the Order's ability to sustain this relatively high number was the establishment of "galley foundations" to finance shipbuilding. The last galley foundation operated until 1659, and the galleys built during this period probably required replacements about ten years later. Increase in the Order's corsair operations and the squadron's participation in the War of Morea alongside Venice required the increase in the size of the galley squadron, which reached its peak number of eight between 1685 and 1701.⁵³ The Treaty of Karlowitz, signed at the end of the War of Morea in 1699, ended hostilities in the Mediterranean and the requirement for a large squadron. The number of galleys was accordingly reduced to six in 1701, to five in 1704, and to four in 1720. The decline of the galley squadron continued steadily as the size of the galleys, as well as their numbers, decreased. The reasons for this shrinking were many and complex, with political, financial, and technological aspects.

Table 4 provides information regarding the sizes of other galley fleets active in the Mediterranean during the sixteenth and seventeenth centuries. The table is not complete, but makes it clear that the Order's squadron, the smallest in the Mediterranean, was no match for the Ottoman navy. The enemies with similar fleets, similar financial means and similar military capability were the cities of Algiers, Tunis and Tripoli, and it was against these forces that the Order most often mobilized its ships.

TABLE 4
Numbers of galleys in major fleets during the sixteenth and the seventeenth centuries

Date	Description	Number of galleys	Average number of galleys in the Order's fleet	Source
1524-1570	Venetian fleet	24 (+ 100 in reserve at the arsenal)	4	Petiet, <i>L'Ordre de Malte</i> , p. 59.
1524	Spanish fleet	25 (+ Genoese galleys hired when needed)	3	Petiet, <i>L'Ordre de Malte</i> , p. 61.
After Lepanto (1571)	Ottoman fleet	200	4	Hess, <i>The Forgotten Frontier</i> , p. 91.
1592-1594	Ottoman main fleet + galleys from Bizerta (raiding Calabria and Sicily)	90-120	5	Anderson, <i>Naval Wars</i> , p. 63.
1601	Ottoman fleet	45-50	4	Anderson, <i>Naval Wars</i> , pp. 67, 70-71, 75-76, 79-80, 85, 87; De Groot, "The Ottoman Threat," p. 208.
1612	Fleet of Algiers	6 (+ 60 sizeable sailing warships)	5	De Groot, "The Ottoman Threat," p. 211.
1612	Fleet of Tunis	6 (+ 14 big sailing ships)	5	De Groot, "The Ottoman Threat," p. 211.
1612	Fleet of Tripoli	2 or 3	5	De Groot, "The Ottoman Threat," p. 211.
1614	Ottoman fleet	80	5	Anderson, <i>Naval Wars</i> , pp. 80-81; De Groot, "The Ottoman Threat," pp. 220-21.
1656	Ottoman fleet	70 (+ 9 galleasses and 28 frigates)	7	Bono, "Naval Exploits," pp. 366-67.
1690	French fleet	55	7	Bamford, "Fighting Ships," p. 273.
1684-1699	Ottoman fleet (War of Morea)	40 (+ 16 sailing ships and other small craft + 10 from Algiers, 6 from Tripoli and 2 from Tunis)	7	Bono, "Naval Exploits," p. 369.

Galley Construction

Based on the information provided in Tables 3 and 4, it is possible to determine the size of the galley squadron during certain time periods. Provided that a galley could be used efficiently for an average of seven years, it is likely that a total of 200 galleys were constructed between 1530 and 1798 to serve in the galley squadron of the Order of Saint John.⁵⁴ The galleys were built either in Malta or their construction was contracted to other arsenals in the Mediterranean.

Galleys Built in Malta

The arsenal of the Order of Saint John was a fortified building near the entrance to Valletta, where small arms, ammunition, guns, and other military stores were kept.⁵⁵ The *darsena* was a sheltered part of the arsenal in Birgu, where galleys were built, repaired and took cover in bad weather or under enemy threat.⁵⁶ Having said that, this three-arched building in Birgu will be referred to as “the arsenal” from here on for the sake of simplifying an already-complicated discussion.

The arsenal of the Order of Saint John was a government monopoly catering exclusively to the needs of the galley squadron.⁵⁷ Several small and private slipways in Grand Harbor and Marsamxett Harbor areas built merchant ships and fishing boats for local use.⁵⁸ The first arsenal of Birgu was built between 1538 and 1542, but the first galley built in Malta was not launched until 1554.⁵⁹ Grandmaster Alof de Wignacourt replaced this first arsenal with a larger one in 1607.⁶⁰ Surprisingly, the surviving archival lists reveal that no galleys were built in Malta between 1555 and 1620, followed by another period of inactivity between 1701 and 1750. There may be several reasons for these gaps, such as the increased construction activities on the

fortifications during the years leading to and following the Ottoman siege or the introduction of third-rate ships in the early eighteenth-century.⁶¹ Whatever the reason, it seems that the arsenal was only active in shipbuilding for 129 of the 268 years the Order was based in Malta,. Based on information provided by Muscat that the construction of a galley took an average of four years in Malta, it seems that the Birgu arsenal produced only 32 galleys.⁶² Only 25 Birgu-built galleys were recorded in the archival lists and historic documents (Table 5).

TABLE 5.
Galleys built at the Birgu Arsenal⁶³

1535	<i>Santa Caterina</i>	1664	<i>San Pietro</i>
1543	<i>Santa Madalena Capitana</i>	1665	Unnamed galley + one <i>Capitana</i>
1551	<i>San Michele Arcangelo</i>	1666	Unnamed galley
1554	<i>Leona + Santa Maria della Vittoria (Capitana)</i>	1668	Unnamed galley
1555	<i>San Fede</i>	1694	<i>Capitana</i> of 30 benches
1620	<i>Capitana</i> of 27 benches	1701	<i>Capitana</i>
1625	Unnamed galley	1750	<i>Santa Caterina</i>
1632	Unnamed galley	1770	Unnamed galley
1633	Unnamed galley	1782	<i>Capitana</i>
1636	Unnamed galley	1792	Experimental galley of 24 benches
1651	Unnamed galley	1792	<i>San Luigi</i>
1652	The seventh galley	TOTAL	25

Table 6 presents a comparison of construction activities in Malta with those of other contemporary locations. Although it may not be fair to compare the three-arched arsenal of Birgu with those of France, it still is necessary to place construction activities in Malta in context. There is no doubt that France was one of the leading naval powers at the time with well-equipped shipyards. But there is also no question that the Maltese shipyards were not very productive.

TABLE 6.
A comparison of the construction activities in Maltese, French and Venetian shipyards
between 1651 and 1740

	Number of galleys built at the Birgu Arsenal ⁶⁴	Number of galleys built in France ⁶⁵	Number of galleys (<i>galia sotil</i>) built in Venice ⁶⁶
1651 - 1660	2	19	112 (1645-60)
1660 - 1668	5	26	37
1670 - 1700	1	96	?
1701 - 1740	1	23	?
TOTAL	9	144	Venetian arsenal produced 350 galleys between 1619 and 1669.

The limited nature of shipbuilding activities in the Birgu arsenal is due to two major factors. Firstly, there is the economic and technological factor. In the sixteenth and seventeenth centuries, increasing demand for galleys in the Mediterranean led to the development of large industrial complexes around the arsenals. The leading arsenals, such as those at Venice and Marseilles, developed such sophisticated networks between the industries involved in shipbuilding that highly standardized but successful designs could be produced with very high efficiency and speed. The industrial complexes around the galley arsenals could prefabricate certain parts to specific standards. For example, the arsenal in Venice could complete a galley in eight months under normal circumstances, but the Venetians are known to have completed a galley within 24 hours on a special occasion, a feat repeated at Marseilles in 1679.⁶⁷ Construction of a similar vessel in Malta would take about four years, mainly because the Birgu arsenal lacked the systematized and standardized construction methods of the larger arsenals, slowing down the construction process.

The second reason for the protracted nature of shipbuilding in Malta is the complete absence of shipbuilding material in the archipelago. All shipbuilding material had to be imported, adding transportation costs to already-high labor expenses on the island. The fact that constructing a ship at home was more expensive than ordering one to be built elsewhere must have been the major reason why the arsenal of Malta never developed beyond its modest size.

At the top of the list of imported shipbuilding material was timber. The first source for the Order was timber acquired from the *commanderies*, especially the forested lands in France and Calabria.⁶⁸ Authorization to fell the trees in these forests was issued by a special order of the Council,⁶⁹ and the quality of the timber was inspected upon its arrival in Malta.⁷⁰ Other archival documents indicate that quantities of timber were purchased from shipyards that were regularly commissioned for the construction of galleys. Some of these centers such as Venice provided better terms of exchange, granting a five-year exemption of duties on timber in the year 1762, renewed in 1770.⁷¹ The terms of this agreement stated that the timber was for the Order's arsenal and was not to be sold for profit. Timber shipments were escorted by the galley squadron,⁷² and the task of investigating the availability and the quality of timber to be purchased was sometimes assigned to the Captain General, who also was occasionally ordered to transport the material to Malta.⁷³ Local Maltese boats were hired to transport the timber to Malta when the squadron was not available for this task.⁷⁴

In addition to timber, a variety of construction materials and finished products were also imported when ships were to be constructed in Malta (Table 7).

TABLE 7
Shipbuilding material imported to Malta and its sources*

Date	Shipbuilding material	Exporter	Details	Source of information
1642	Shipbuilding timber	Messina	Two galleys were sent to Messina to escort a large galleon carrying the timber	AOM 257, f. 102v, 11 January 1642.
1596	Masts and lateen-yards	Calabria		AOM 449, f. 269v, 28 March 1596.
1596	Timber	Calabria	Captain-General was ordered to obtain information about shipbuilding timber.	AOM 449, f. 269v, 28 March 1596.
1598	400 oars	Calabria		AOM 451, f. 257v, 12 October 1598.
1600	Masts	Trapani	Captain-General was ordered to get three masts	AOM 449, f. 269v, 28 March 1596.
1610	Masts and yards	Messina or at Naples	The squadron was to be fit out with masts and lateen-yards overseas	AOM 453, f. 205v and 257v, 27 April 1600 and 10 August 1600 respectively
1605	Shrouds	Messina		AOM 455, f. 277v, 7 November 1605.
1608	Materials for sails	Messina		AOM 663, f. 112v, 20 December 1608.
1641	Shrouds	Sicily	Don Angelo Arabito of Sicily was contracted to supply them for the next four years at the rate of nine <i>scudi</i> per one <i>qantar</i> .	AOM 737, f. 106v, 12 June 1541.
1642	300 oars	Calabria	<i>Padrona</i> , Chev. Fra Antonio Carafa, was sent to Naples obtain an export permit for the oars which were withheld	AOM 257, f. 103r, 16 January 1642.
	Nails, brass sheets, copper and iron wire, rasps, files, houghlasses and paint ingredients.	Venice	Orders were placed with drawings of the nails, or a specimen box including the actual nails.	AGPV 40, 41 and 43, in Muscat, "The Arsenal," pp. 287-88.
Seventeenth century	Cotton yarn for weaving sail cloth	Calabria and Marseilles	Imported cotton made a lighter sail, creating less stress on the masts and the <i>antennas</i> of the galleys.	NLM AOM 1759, ff. 462, 463v; NLM Lib. 413f. 223, in Muscat, "The Arsenal," p. 297.
Eighteenth century	Shipbuilding timber	Venice	Maltese merchants provided the timber purchases and transportation to Malta.	NLM AOM 1770, f. 271; AGPV 43, in Muscat, "The Arsenal," p. 310.
Eighteenth century	Hemp	Ferrara hemp from Venice, Bologna and Ancona	Russian hemp was the most popular but the Order generally could not afford it.	AGPV 43, 44, in Muscat, "The Arsenal," p. 295.

* Unless indicated otherwise, the archival references are inferred from Joseph F. Grima, "Galley Replacements in the Order's squadron (c. 1600-c.1650)," *Malta Historica* 8.1 (1980), pp. 51-52.

Galleys Ordered Abroad

While about 30 galleys of the Order were built in Malta, approximately 170 were built in foreign arsenals.⁷⁵ Orders for the construction of galleys abroad were placed with shipyards providing the best possible conditions in terms of cost and delivery date.⁷⁶ Information regarding the Order's galleys built outside Malta is summarized in Table 8.

TABLE 8.
Galleys built for the Order outside of Malta

Date	Location	Archival reference (if available) and the Source of information
1546	Messina (2)	Muscat, "The Arsenal," p. 271, table II.
1555	Naples (2), Messina	Muscat, "The Arsenal," p. 271, table II.
1556	Barcelona (2)	Muscat, "The Arsenal," p. 271, table II.
1561	Marseilles	Muscat, "The Arsenal," p. 271, table II.
1568	Marseilles (2)	Muscat, "The Arsenal," p. 271, table II.
1569	Marseilles (2)	Muscat, "The Arsenal," p. 271, table II.
1571	Naples, Messina (2)	Muscat, "The Arsenal," p. 271, table II.
1574	Barcelona (2)	Muscat, "The Arsenal," p. 271, table II.
1583	Naples	Muscat, "The Arsenal," p. 271, table II.
1584	Naples	Muscat, "The Arsenal," p. 271, table II.
1588	Messina	Muscat, "The Arsenal," p. 271, table II.
1589	Leghorn	Muscat, "The Arsenal," p. 271, table II.
1594	Messina	Muscat, "The Arsenal," p. 271, table II.
1597	Messina	Muscat, "The Arsenal," p. 271, table II.
1598	Messina	AOM 451, f. 253r, 4 August 1598 in Grima, "Galley Replacements," p. 50.
1600	Barcelona	Muscat, "The Arsenal," p. 271, table II.
1602	Genoa	AOM 454, f. 260r, 4 May 1602 in Grima, "Galley Replacements," p. 50.
1603	Marseilles	AOM 454 ff. 285v, 14 May 1603 in Grima, "Galley Replacements," p. 50.

TABLE 8. — *Continued*

Date	Location	Archival reference (if available) and the Source of information
1606	Barcelona, Naples, Messina, Palermo, Marseilles	Muscat, "The Arsenal," p. 271, table II.
1608	Naples	AOM 456, f. 292r, 20 March 1608 in Grima, "Galley Replacements," p. 50.
1613	Marseilles	Muscat, "The Arsenal," p. 271, table II.
1617	Marseilles	AOM 454 ff. 330v-331r, 20 March 1604 in Grima, "Galley Replacements," p. 50.
1619	Marseilles	Muscat, "The Arsenal," p. 271, table II.
1624	Marseilles (2)	Muscat, "The Arsenal," p. 271, table II.
1625	Naples Messina	Muscat, "The Arsenal," p. 271, table II.
1626	Augusta	AOM 256, f. 59r, 20 April 1626 in Grima, "Galley Replacements," p. 50.
1626	Naples	Muscat, "The Arsenal," p. 271, table II.
1632	Messina	AOM 110, f. 167r, 10 May 1632 in Grima, "Galley Replacements," p. 50.
1633	Messina	Muscat, "The Arsenal," p. 271, table II.
1634	Messina	AOM 256, ff. 12r-v, 23 September 1634 in Grima, "Galley Replacements," p. 50.
1637	Messina	AOM 256, f. 172v, 25 November 1637 in Grima, "Galley Replacements," p. 50.
1645	Messina	Muscat, "The Arsenal," p. 271, table II.
1642	Tuscany	AOM 257, ff. 110r, 18 March 1642 in Grima, "Galley Replacements," p. 50.
1648	Genoa	Muscat, "The Arsenal," p. 271, table II.
1651	Messina	Muscat, "The Arsenal," p. 271, table II.
1654	Genoa, Leghorn, Marseilles	Muscat, "The Arsenal," p. 271, table II.
1655	Pisa	Muscat, "The Arsenal," p. 271, table II.
1662	Messina	Muscat, "The Arsenal," p. 271, table II.
1701	Leghorn, Genoa	Muscat, "The Arsenal," p. 271, table II.
1703	Civitavecchia	Muscat, "The Arsenal," p. 271, table II.
1743	Civitavecchia	Muscat, "The Arsenal," p. 271, table II.
Total	93	

According to this information, about one-third of the galleys built outside Malta were built in Messina (28 galleys). The second most common center was Marseilles, which delivered 23 galleys to the Order's squadron. The arsenals of Naples and Barcelona built 15 and 14 galleys respectively. Other locations of minor importance, such as Leghorn, Genoa, Civitavecchia, Palermo, Augusta, Pisa, and Tuscany, built a combined total of 13 galleys for the Order during a period of about two centuries. A very rough estimate would be that the Order of Saint John commissioned the construction of a galley in a foreign arsenal one every two years.

By the eighteenth century, timber already cut to size was brought from Malta's principal marine supplier, Venice.⁷⁷ This suggests standardization in galley design and may also explain why the Knights did not purchase galleys from Venice. Earlier they had recruited Venetian shipwrights to work in Malta, and now they brought in prefabricated galleys.⁷⁸

When a galley was built outside Malta, the usual practice was to send the galley to be replaced to that arsenal. Upon arrival the old galley would be stripped of all its armaments and fittings that were then transferred to the new vessel. The crew who brought the old galley would man the new ship and leave the old one to be sold or broken up. The value of the old vessel would be deducted from the cost of the new vessel.⁷⁹ If the galley being replaced was still serviceable, it would be kept in Malta as a backup.⁸⁰ When the old galley to be replaced was not

in a condition to transport its crew to the shipyard, the entire squadron had to be dispatched for the transportation of the crew to man the new ship. When one considers the high numbers of crewmen required to operate these ships, it is evident that at least four other galleys were required to transport a crew of about 600. In 1608, for example, the crew of *San Giovanni* was transferred on board the other four galleys to sail a new galley from Naples to Malta. The old galley, *San Giovanni*, was considered still serviceable and was kept in Malta.⁸¹ In some cases, the new hulls would be towed to Malta to be fitted out in the Birgu arsenal.⁸²

Cost and Maintenance of the Galley Squadron

The heavy expenditures incurred by the galley squadron constituted one of the recurrent problems for the Order's treasury. Most of the information regarding the cost and maintenance of the galley squadron dates from the seventeenth century. Based on variations in the prices during this period, it seems that the costs were fairly stable, and it is possible that they did not change too much during the first half of the eighteenth century. The value of the type of *scudi* used in Malta is difficult to establish based on published sources and archival documents. For this reason, the prices provided below only allow an evaluation within the context of Malta and

perhaps a chronological comparison. Figures are available for the expenditures of other European navies for this period, but both the larger sizes of those fleets and the absence of a reliable conversion equation make it difficult to compare the Maltese figures with contemporary naval spending elsewhere. Nonetheless, the extent of maintenance costs for the galley squadron can be assessed based on the salaries in Malta. According to the numismatic data, the cost of 750 grams of bread in the seventeenth century was one *tari*, and a soldier's daily pay was about four *tari*.⁸³ One *tari* was equal to 20 *grani*, and 12 *tari* made one *scudo*. Table 9 provides detailed information about construction and maintenance costs for the galley squadron. Construction cost of an ordinary galley was about 5,500 – 6,500 *scudi*, an amount that equaled the annual income of 50 soldiers.⁸⁴ Other comparative information about the prices of other items comes from the documents of the prize courts in Malta (see chapter XI, section about the Corsair Operations). According to this information, the fixed price paid for slaves by the Treasury of the Order was 137 *scudi* and 6 *tari* per slave, meaning that the construction of a galley was equal to the price of about 40-45 slaves.⁸⁵

TABLE 9.
Maintenance and construction costs for the galleys of the Order's squadron

Date	Number of ships	Cost	Details	Source
1583		(64 percent of the income)	Out of an income of 151,734 <i>scudi</i> , the Order spent 97,535 <i>scudi</i> on the galleys, which sum probably included also replacements since none of the galley foundations had yet been founded.	Grima, "The Maintenance," p. 145.
1587	Maintenance cost for the galley squadron	50,000 <i>scudi</i> (24 percent of the income)	In this year the income was 208,000 <i>scudi</i> and expenditure was 201,393 <i>scudi</i> . Other expenses were: feeding of the establishment and paying office holders (29,000 <i>scudi</i>), hospital (13,000 <i>scudi</i>), fortifications (12,000 <i>scudi</i>), Grandmaster and the palace (8,000 <i>scudi</i>), Saint John's conventual church (3,200 <i>scudi</i>).	Blouet, <i>The Story of Malta</i> , p. 105.
1587 (alternative source)	Maintenance cost for the whole squadron (Four galleys) Maintenance cost for the Arsenal	75,671 <i>scudi</i> (18,917 <i>scudi</i> per galley) 1,280 <i>scudi</i>		Grima, "The Maintenance," p. 145.
1604	Construction of <i>San Sefirio</i> Construction of another <i>San Sefirio</i> (II)	5,327 <i>scudi</i> 6,362 <i>scudi</i>	Constructed in Barcelona, financed by the 1598 Claramonte Foundation. Constructed in Malta, financed by the 1598 Claramonte Foundation.	Grima, "Galley Replacements," p. 49.
1605	Maintenance cost for one galley	Upkeep of a galley was considered to be between 18,000 and 20,000 <i>scudi</i>		Dal Pozzo, <i>Historia della sacra</i> , 1496, in Grima, "The Maintenance," p. 145.
1610	Maintenance cost for one galley	12,000 <i>scudi</i> annually		NLM Lib. 413, 214 <i>et seq</i> , in Muscat, "The Arsenal," p. 306.
1613	Construction of galley <i>San Lorenzo</i>	4,812 <i>scudi</i> : materials 1,530 <i>scudi</i> : wages total: 6,362 <i>scudi</i>	Built in Vittoriosa (Malta) – 300 <i>scudi</i> cheaper than the galley built in Messina in 1619 below (but ultimately more expensive considering the transportation costs of materials to Malta).	Grima, "Galley Replacements," p. 49.
1615	Construction of galley <i>San Lorenzo</i> Construction of another <i>San Lorenzo</i> (II)	6,383 <i>scudi</i> 6,127 <i>scudi</i>	Constructed in Messina, financed by the 1598 Claramonte Foundation. Constructed in Malta, financed by the 1598 Claramonte Foundation.	Grima, "Galley Replacements," p. 49.

TABLE 9. — Continued

Date	Number of ships	Cost	Details	Source
1617	Construction of <i>San Stefano</i>		Built in Vittoriosa (Maha).	AOM 459, ff. 338r-v, 1 April 1618, in Grima, "Galley Replacements," p. 50.
1618	Construction of galley <i>San Giovanni Battista</i>	4,480 scudi: materials 1,804 scudi: wages total: 6,284 scudi	Built in Messina	AOM 459, ff. 263v-264r, 7 January 1619, in Grima, "Galley Replacements," p. 49.
1619	Construction of galley <i>San Giovanni</i>	6,285 scudi	Built in Maha.	AOM 109, f. 37v, 22 September 1627, in Grima, "Galley Replacements," p. 49.
1626	Construction of a <i>Capitana</i>	9,742 scudi	Built in Maha.	AOM 109, f. 37v, 22 September 1627, in Grima, "Galley Replacements," p. 49.
1627	Maintenance cost for each galley	30,000 scudi	A gross exaggeration according to Grima.	Salva, <i>La Orden de Maha</i> , p. 82.
1631	Maintenance cost for each galley	27,700 scudi Increased in the following years by 2,000 scudi (total: 29,700 scudi)	These amounts do not include the actual cost of a new galley hull but the actual recurring expenses which included the salaries, provisions, the rowers' change of clothes, sails, shrouds, canvas, cordage and general repairs.	AOM 112, f. 38r-v, 25 May 1637, in Grima, "Galley Replacements," p. 48; Grima, "The Maintenance," p. 145.
	Maintenance cost per galley	27,700 scudi 24,000 scudi	The cost of a new hull reckoned at an average of between 5,000 – 6,000 scudi.	NLM 162, f. 106v, in Grima, "Galley Replacements," p. 48. Muscat, "The Arsenal," p. 306. AOM 311, f. 47 r-v.
1631	Maintenance cost for the whole squadron (6 galleys)	144,000 scudi	Perhaps the higher figure also includes the expenses of new galley hulls, since only two foundations for galley-building were operating in 1631.	AOM 311, f. 47 r-v.
1632	Cost of a galley ordered at Messina shipyard	1,168 scudi 5,500 scudi	A cheaper price than the construction in Maha.	AOM 110, f. 167r, 10 May 1632, in Grima, "Galley Replacements," p. 49.
1637 - 1649	Maintenance cost for the whole squadron (6 galleys)	123,000 scudi (annually)	Paid annually by the Valdina and Lascaris foundations, responsible for the squadron's upkeep.	Grima, "The Maintenance," p. 145.

TABLE 9. — Continued

Date	Number of ships	Cost	Details	Source
	Maintenance of the <i>Capitana</i>	23,000 <i>soudi</i>		AOM 737, f. 87r; 20 July 1637; AOM 738, f. 2r; 28 July 1644, in Grima, "Galley Replacements," p. 48; also NLM AOM 1759, ff. 502v, 503, in Muscat, "The Arsenal," p. 306.
	Maintenance cost for each of the other galleys	20,000 <i>soudi</i>		
1630	Maintenance cost for the squadron of six galleys	Between 125,000 and 130,000 <i>soudi</i> (20,833-21,666 <i>soudi</i> per galley)		The Prior of Dacia, Fra Christian Osterhausen NLM 162, f. 106v, in Grima, "The Maintenance," p. 145.
During the Grand Mastership of Antoine de Paule (10 March 1623 - 9 June 1636)			Out of an average yearly income of 269,116 <i>soudi</i> , over 125,000 <i>soudi</i> — about one-half — was spent on the galley squadron and this was a period when five of the galley foundations were already in operation. (46.4 per cent)	Blouet, <i>The Navy</i> , p. 105.
May 1637	Maintenance cost for the one galley	20,000 <i>soudi</i> annually	Captain of the galley <i>San Nizolo</i> , Chevalier Antonio Papacoda, offered to see to the maintenance. A document related to the uprisings in Malta against a new tax imposed on the local population for the construction of fortifications mention that the annual income of the Knights is 2,000,000 <i>soudi</i> while the annual income of the 'islanders' was 160,000 <i>soudi</i> .	Grima, "The Maintenance," pp. 149-150. Grima, "The Maintenance," pp. 149-150. For the reference about the annual incomes Hoppen, "Military Priorities," p. 418.
Between 1631 and 1637		27,700 <i>soudi</i> - 29,700 <i>soudi</i> annually		
20 July 1637	Maintenance cost for each of the five galleys	20,000 <i>soudi</i>	Proposal of contractor, Bailiff Fra Don Carlo Valdivia valid for four years.	Grima, "The Maintenance," p. 150.
	Maintenance cost for the larger <i>Capitana</i>	23,000 <i>soudi</i>		
1641-1645	Maintenance cost for the whole squadron	123,000 <i>soudi</i> annually	The same sum of money contracted in 1637. Probably prices had increased and so it was becoming increasingly difficult for Valdivia and the Treasury officials to come to terms.	Grima, "The Maintenance," p. 151.
1631	Maintenance cost for each galley	27,700 <i>soudi</i>	Estimated cost.	AOM 112, f. 38r; 25 May 1637, in Grima, "The Maintenance," p. 152.

TABLE 9. — *Continued*

Date	Number of ships	Cost	Details	Source
Between 1631 and 1637	Maintenance cost for the whole squadron of six galleys	166,200 <i>scudi</i> annually		
		123,000 <i>scudi</i>	Valdina and Lascaris Foundations' contracts (Saving the Order about 43,200 <i>scudi</i> annually).	
	Total expenditure on the six galleys	Had increased by about 12,000 <i>scudi</i>		
		Totaling: 135,000 <i>scudi</i>		
1766	Total expenditure for the galleys and barques	177,107 <i>scudi</i>		
	Total expenditure for the sailing ships	193,415 <i>scudi</i>	The total income (of the navy?) in this year was 1,073,920 <i>scudi</i> (about 84 percent of the income is spent for the maintenance).	Rossi, <i>Storia della marina</i> , p. 89.
	Total expenditure on the navy	899,435 <i>scudi</i>		
	Total expenditure for the galleys and barques	168,578 <i>scudi</i>		
1768-69	Total expenditure for the sailing ships	203,225 <i>scudi</i>	Total revenue was 864,801 <i>scudi</i> .	Rossi, <i>Storia della marina</i> , p. 89; Bono, "Naval Exhibits," p. 382.
	Total expenditure on the navy	961,216 <i>scudi</i>		
1785	Two galleys sold to Spain	34,500 <i>scudi</i>		Bono, "Naval Exhibits," p. 382.

In general, it can be concluded that, throughout this period, the prices of imported galleys were less than the costs incurred in building it in Malta. Maintaining a galley was much more expensive than constructing a new one. In 1605 the maintenance cost of one galley was considered to be between 18,000 and 20,000 *scudi*,⁸⁶ while in 1637 the treasury calculated the expenses of a single galley as 29,700 *scudi*.⁸⁷ Based on the report of the Prior of Dacia, Fra Christian Osterhausen, writing in the middle of the seventeenth century, the maintenance cost for a galley was about 20-21,000 *scudi*.⁸⁸ Although it may be an exaggeration, Salva claims that the maintenance of each galley cost the Order 30,000 *scudi* in 1627.⁸⁹

In 1583 the Order spent 64 percent of its total income maintaining its galley squadron, which may also have included the cost of some replacement galleys. During the Grandmastership of Antoine de Paule (1623-1636), out of an average yearly income of 269,116 *scudi*, more than 125,000 *scudi* (about half) were spent on the galley-squadron, and this was a period when five of the galley foundations were already in operation.⁹⁰ On the other hand, the figures about expenditures in 1583 may be excessive when compared to that of 1587 when the Order spent 75,671 *scudi* on four galleys and 1,280 *scudi* on the arsenal.

Maintenance costs of the galley squadron included the wages of the rope and sail makers, caulkers, carpenters and blacksmiths. In addition, there were the regular costs of provisions. The captain of a galley was paid an allowance based on an estimated sum to cover the cost of two-thirds of the provisions.⁹¹ He was expected to contribute the rest of the funds from his own pocket. The Treasury provided the bread of the *ciurma* (rowers) on a regular basis, but a captain spent an estimated annual total of 3,826 *scudi*, 5 *tari*, 10 *grani* per galley.⁹² The

reason why many Knights accepted command of a galley was because this type of service was one of the ways to attain a position in charge of a *commandery*. Acquisition of rich *commanderies*, from whose income the commander retained a percentage was the ultimate achievement for a Knight and was the reason why many joined the Order. In fact, a number of *commende di gratia* were kept vacant and awarded to outgoing captains. If there were no such incentive, probably there would never have been enough Knights willing to command the galleys.⁹³ Nonetheless, finding Knights to captain the galleys remained one of the incurrent problems throughout the Order's Maltese era. During the seventeenth century fewer and fewer knights were willing or financially able to risk such a sum. A letter dated 1649 includes the complaints of Grandmaster Lascaris to the Order's ambassador in Rome that he could not recruit enough Knights to man the galleys, since they were not willing to risk their lives or fortunes.⁹⁴

Grandmaster Lascaris sought solutions to these problems. It was clear that the expenses involved in the two offices of captain general and captain were a deterrent to the better development and management of the squadron. The ever-increasing number of elected captains who refused a commission and actual captains, who resigned their office before the end of their terms of two years due to their inability to cope with the expenses, required urgent intervention. Lascaris realized that the term of two years did not allow a captain or captain-General to develop his talents or learn the seamanship necessary to enhance and uphold the prestige and glory of the Order. In this system, there was no room for a talented and successful seaman to advance and contribute to the success of the fleet, unless he was also very wealthy. Therefore, a new system, which did not require the individual captains to provide part of the funds required for the maintenance of the galleys, was badly needed.⁹⁵

Things started to change slowly from 1637 onwards. In this year, the captain of the galley *San Nicola*, Chevalier Antonio Papacoda, was assigned the maintenance of one galley for the fixed price of 20,000 *scudi* annually upon his own request.⁹⁶ This contract was replaced almost immediately with a more beneficial one. Bailiff Fra Don Carlo Valdina proposed to take over the maintenance of all five galleys for the price of 20,000 *scudi* each.⁹⁷ Valdina's four-year contract was signed on July 20, 1637.

The Council of the Order soon realized that this system benefited them greatly. In 1641 the Council called for contract proposals, and the winner (or the only applicant) was Valdina, renewing his contract for another four years.⁹⁸ After this date, several other contracts were signed with different individuals, including Grandmaster Lascaris himself. The expiration date of the last contract is 1649, after which the Common Treasury of the Order, once again resumed maintenance of the galleys directly.⁹⁹

The Council members and the Procurators of the Common Treasury had no doubt that these contracts were saving the Order thousands of *scudi* every year.¹⁰⁰ The major disadvantage of this system, which led to its abandonment, was that the Order did not have direct control over the maintenance of the squadron. The events indicate that in his second term Valdina underbid, repeating his offer of the previous term (123,000 *scudi*). However, because of price fluctuations in materials required to perform the work, it was increasingly difficult for Valdina to continue

honoring his contractual obligations. Therefore, the squadron was not prepared for military undertakings.¹⁰¹ A Commission was assigned in 1647 to investigate whether or not these contracts were beneficial.¹⁰² The report indicated that in fact the Order saved very little by contracting out the maintenance of the galleys, and since enough cash was not always readily available, the Order as a body could obtain credit in Sicily more easily than a contract holder.¹⁰³ However, based on surviving archival documents, it is clear that the Order did benefit greatly. In 1631 the average cost of maintaining one galley was about 27,700 *scudi*, and the whole squadron of six galleys cost the Order 166,200 *scudi* annually.¹⁰⁴ But the Valdina and Lascaris contracts stipulated a figure of 123,000 *scudi* annually for the same squadron of six galleys, thus saving the Order about 43,200 *scudi* annually. Moreover, the amount saved was actually greater, since it had been calculated that total expenditure on the six galleys had increased by about 12,000 *scudi* between 1631 and 1637.¹⁰⁵ In the end, the Council decided to continue contracting out.¹⁰⁶

The Valdina and Lascaris contracts provide very detailed information about the crew numbers (*gente di capo* and *ciurma*) on board each galley, the amount of salaries, the value of the provisions, the clothing of the *ciurma* and the particular duties of the members of the Order on board.¹⁰⁷ These documents also describe the regular maintenance work to be carried out and the supplies required for such work.¹⁰⁸ The terms of these contracts specified that the Order was to hand over the galleys fully armed and fitted-out with an inventory of goods on board. The owners expected to receive them back in the same condition on termination of the contract.¹⁰⁹ The contractor was allowed to use the galleys to ferry goods used by the squadron without additional payment to the Order.¹¹⁰

These two contractors then gave out other contracts to subcontractors. In 1644 a certain Ignatio Ribera testified in the Courts of Law that he had been given various contracts in previous years to supply the Order with wood and ships' biscuit.¹¹¹ Since ships' biscuit was one of the items to be supplied by Valdina, one may safely assume that Ribera obtained contracts from him to supply this commodity. In 1645 Giovanni Alard was contracted to supply material for the galley shrouds, which he failed to do. For this, he had to answer to Grandmaster Lascaris who, by now, had taken over the maintenance of the squadron which, it was alleged, was impotent because of the lack of stores of this kind.¹¹²

Galley Foundations

Six galley foundations were set up by six different benefactors between 1598 and 1636 (Table 10). The aim of each foundation was to have enough income from invested capital to finance the construction of a new galley hull every so many years. Since the Order had a squadron of six galleys, corresponding to the same number of foundations, the problem of providing the capital needed for building galley hulls was, therefore, solved.¹¹³

TABLE 10.
The six galley foundations of the period between 1598 and 1636

Name and foundation date	Initial provider of the funds	Terms of contract	Construction & Annual Income	Sources
Claramonte foundation - 1598	Fra Stefano de Claramonte, Bali' of Caspe and a former Captain-General of the galley squadron (1593-5)	The capital sum of 12,000 scudi was placed at the disposition of the Order with the provision that the interest derived from its application would be used to construct a new galley hull every eight years. If possible, the newly-constructed hull would be of a flagship and was to be named <i>San Stefano</i> . On its stern, together with the arms of the Order and of the then-reigning Grandmaster, the arms of the donor were also to be displayed.	AOM, Treas. A. Vol. 96, f. 1v is the report of a commission examining the affairs of the Claramonte foundation and references to galleys constructed by this foundation: <i>Santo Stefano, San Lorenzo, San Giovanni and Capriana</i> . The document includes a statement mentioning that both foundations were merged into one. <u>Annual income: 787 scudi</u> For the seven galleys built in the space of 34 years by this foundation see Table 11.	Also see AOM 102, ff. 97r and 120v-121r, 15 March and 15 July 1608; AOM 109, f. 37v, 22 September 1627; AOM 222, f. 166r, 13 January 1598; AOM 293, ff. 11v-16v and 98r; AOM, Treas. A, Vol. 96 ff. 1v-2v, in Grima, "Galley Replacements," p. 56; Dal Pozzo, <i>Historia della Sacra</i> , I: 395-96 and 486; E. Rossi, <i>Storia della marina</i> , p. 57; Mori Ubaldini, <i>La marina</i> , p. 65. For the annual income; Rossi, <i>Storia della marina</i> , p. 58
Lussan foundation - 1614	Prior of Saint Gilles, Fra Pietro de Spamerz Lussan	Provide enough funds for the construction of a flagship every five years at Marseilles, and which was to have the name Lussan sculptured on its <i>dragante</i> .	<u>Annual income: 1,263 scudi</u>	AOM, Treas. A, Vol. 96, f. 12v; AOM 105, ff. 76v-77v, 14 August 1614; AOM 105, ff. 97v-98v; AOM 222, f. 166, both 5 December 1614, in Grima, "Galley Replacements," p. 57; Dal Pozzo, <i>Historia della Sacra</i> , I: 601; Rossi, <i>Storia della marina</i> , p. 57; Mori Ubaldini, <i>La marina</i> , p. 67. For the annual income; Rossi, <i>Storia della marina</i> , p. 58

TABLE 10. — *Continued*

Name and foundation date	Initial provider of the funds	Terms of contract	Construction & Annual Income	Sources
			1627 – The galley known as the <i>Lussana</i> , but was also called the <i>San Pietro</i> (it was not a <i>Capitana</i> and built in Malta, and not Marseilles, upon the Venerable Council's request).	Reference as <i>Lussana</i> in AOM 109, f. 46r, 22 September 1627, in Grima, "Galley Replacements," p. 57. In AOM 6430, f. 136r, no name is given but Moni Ubaldini, <i>La marina</i> , p. 573, lists the galley as <i>San Pietro</i> , which tallies with the Christian name of the foundations' donor. Rossi, <i>Storia della marina</i> , p. 143, does not name the galley.
The Gallarbois foundation - 1631	Fra Giacomo de Gallarbois, Prior of Aquitaine	Construction of a galley hull completed with all its wooden components including its <i>rambate</i> , yards and masts. The size of the hulls and the place where they were to be constructed were to be the decision of the Grandmaster and the Venerable Council. However, it was stipulated that the galley would be named <i>San Luigi</i> , after the King of France, and that the donor's coat-of-arms would be placed alongside those of the reigning Grandmaster and the Order. Lastly, it was agreed that if the value of the foundation increased, more galleys were to be built.	1641 – Construction of their first galley. The delay is probably due to the fact that their initial capital was only 15,000 <i>scudi</i> and ten years had elapsed, presumably to allow more capital to be accumulated. 1663 - a <i>Capitana</i> cost 10,804 <i>scudi</i> after 1,296 <i>scudi</i> were recovered from the sale of the flagship taken out of service. 1667 - a galley cost 6,848 <i>scudi</i> after allowing for 670 <i>scudi</i> obtained from the sale of the old galley.	AOM, Treas. A, Vol. 96, ff. 22v-23r; AOM 110, ff. 67r-71v; AOM 222, f. 116r; AOM 1924, ff. 14-27; AOM 737, f. 51r; Dal Pozzo, <i>Historia della Sacra</i> , I: 802; Rossi, <i>Storia della marina</i> , p. 57; Moni Ubaldini, <i>La marina</i> , p. 68. Grima, "Galley Replacements," p. 58. Regarding the construction of the capitana see AOM 1680, <i>Trattato del Tesoro</i> , p. 40, in Grima, "Galley Replacements," p. 59. For the annual income; Rossi, <i>Storia della marina</i> , p. 58.
De Paule foundation - 1635	Grandmaster Antoine de Paule (1623-36)	A new galley hull was to be built every five years and was to be named ' <i>San Giovanni de Paula o Paulina</i> .' On the stern, there was to be a relief figure of Saint John the Baptist together with the arms of the donor, the Grandmaster and the Order. On its <i>dragante</i> , the galley was to have the name <i>De Paula</i> .	<u>Annual income</u> : 350 <i>scudi</i> . <u>Annual income</u> : 2,358 <i>scudi</i> .	AOM, Treas. A, Vol. 96, ff. 106v-107r; AOM 111, ff. 156v-161r; AOM 222, f. 166v; all 20 September 1635. See also Dal Pozzo, <i>Historia della Sacra</i> , I: 837; Rossi, <i>Storia della marina</i> , p. 57; Moni Ubaldini, <i>La marina</i> , p. 68, in Grima, "Galley Replacements," p. 58. For the annual income; Rossi, <i>Storia della</i>

TABLE 10. — Continued

Name and foundation date	Initial provider of the funds	Terms of contract	Construction & Annual Income	Sources
Cavaretta foundation - 1636	Prior of Venice Fra Nicolò Cavaretta - (Admiral between 1624 - 1626)	inscribed. A further condition stipulated that the old galley to be taken out of service was to be publicly sold and the earnings from its sale would go towards the expenses of the new galley.	<u>Annual income: 935 scudi.</u>	AOM, Treas. A, Vol. 96, f. 32v; AOM 111, ff. 235v-238v; AOM 222, f. 166v; all 16 July 1636. AOM 1924, ff. 1-9. AOM 1934 deals solely with the setting-up of this foundation. Dal Pozzo, <i>Historia della Sacra</i> , I: 12; Rossi, <i>Storia della marina</i> , pp. 57-58; Mori Ubaldini, <i>La marina</i> , p. 68, in Grima, "Galley Replacements," p. 59; Muscat, "The Arsenal," p. 277. For the annual income: Rossi, <i>Storia della marina</i> , p. 58.
Ventimiglia foundation - 1636	Prior of Capua, Fra Pietro de Ventimiglia (Admiral between 1626 - 1629)	The new galley, to be called <i>San Pietro</i> , would be constructed every five years (or when necessary) at Messina. There were the usual stipulations about arms - three red lions set on a golden field - and name on poop and dragante and the proceeds from the sale of the old galley.	<u>Annual income: 804 scudi.</u>	AOM, Treas. A, Vol. 96, f. 42v; AOM 111, ff. 196v-202v; AOM 222, f. 166v; all 9 May 1636. Cf. also Dal Pozzo, <i>Historia della Sacra</i> , 2: 12; Rossi, <i>Storia della marina</i> , p. 57; Mori Ubaldini, <i>La marina</i> , p. 68, in Grima, "Galley Replacements," p. 58.
Lascaris foundation - 1651	Grandmaster Jean Paul Lascaris Castellar	A galley hull was to be constructed over so many years and the foundation was responsible for paying the maintenance costs. However, this foundation had a short life since it had to be absorbed by the Order's Treasury in 1659 due to financial difficulties.	<u>Annual income: not known.</u>	AOM 1759, ff. 322v-335v; AOM 1760, ff. 283v-296v; dates ranging from 2 October 1651 to 6 June 1659, in Rossi, <i>Storia della marina</i> , p. 56, in Grima, "Galley Replacements," p. 59. For the annual income: Rossi, <i>Storia della marina</i> , p. 58.

Thus, when the Order kept a squadron of six galleys, there were enough funds available to replace each galley hull without extra cost for the Order. Four of the galleys from these foundations could be constructed in Malta. The other two, the Lussan and Ventimiglia galleys, were to be fabricated at Marseilles and Messina, respectively, though they could be constructed locally if the Grandmaster and the Venerable Council so decided. When such constructions were being carried out in Malta, a Knight was placed in charge of the works to avoid any fraud. According to the terms of the Cavarretta foundation, this Knight had to be a relative of Fra Nicolò Cavarretta.¹¹⁴ Table 11 provides a summary of activities for one of these foundations, illustrating how this system in practice contributed to the maintenance of the galley squadron.

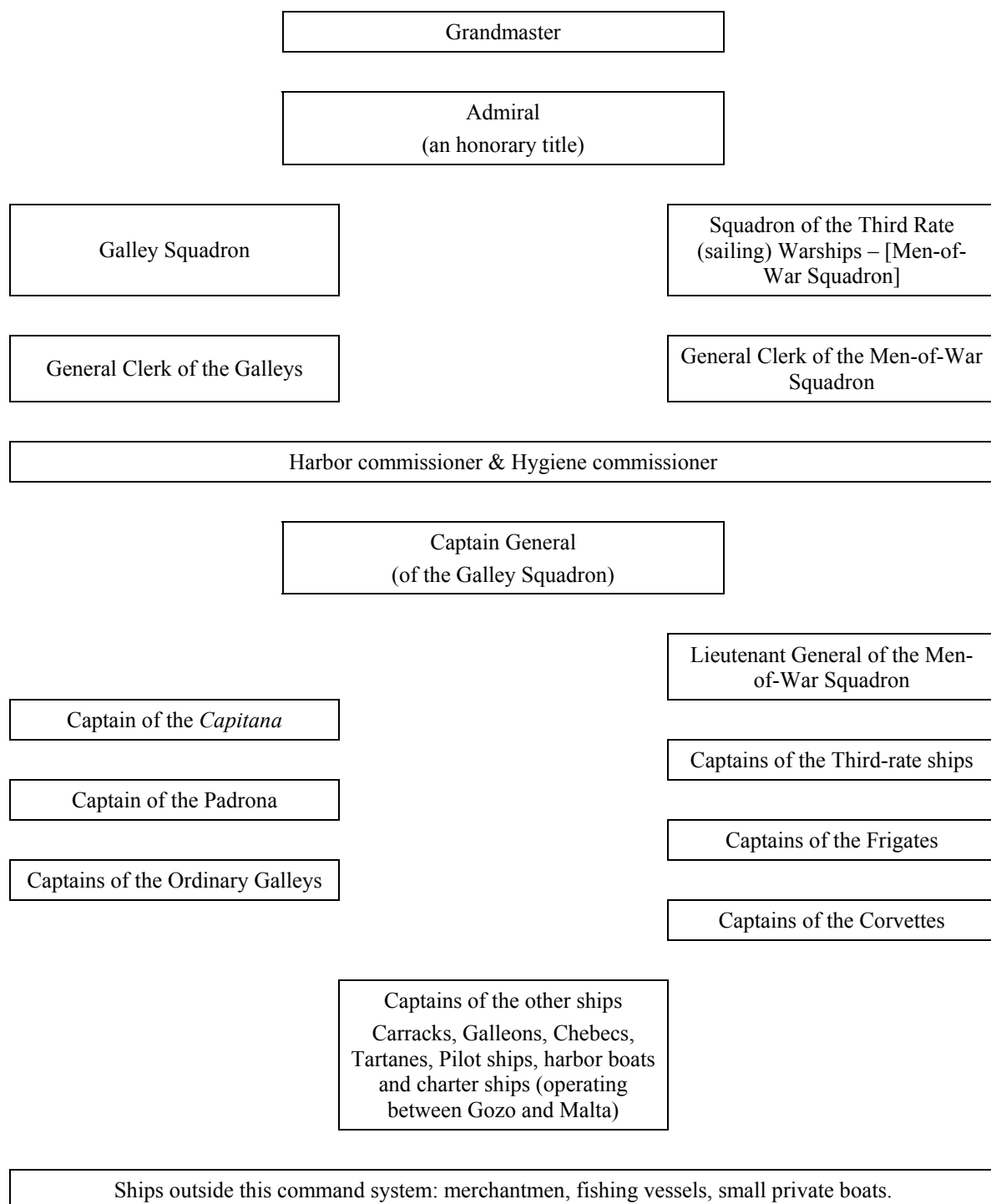
TABLE 11.
Ships built by the Claramonte Foundation

Date	Ship	Location of construction	Source of information	Cost according to AOM 109, ff. 37v-39r, 22 September 1627
1600 - 1604	<i>Santo Stefano</i>	Barcelona	AOM 100, f. 168r, 14 December 1600; AOM 101, f. 34r, 5 April 1604, Bono, "Naval Exploits," p. 380.	5,327 <i>scudi</i> and 7 tari
	<i>San Lorenzo</i>	Malta		6,362 <i>scudi</i> 3 tari 12 grani
1604- 1625	Four other galleys		AOM 108, ff. 62r-v, 16 January 1625.	6,383 <i>scudi</i> 2 tari 18 grani 6,127 <i>scudi</i> 6 tari 19 grani 6,285 <i>scudi</i> and 2 tari 9,742 <i>scudi</i> 8 tari 2 grani
1626	The sixth galley to be commissioned as <i>Capitana</i>	Malta	AOM 737, f. 34v, 16 September 1626.	
1630		Messina (later rescinded)	AOM 110, ff. 39r-v, 8 October 1630.	
1631	The Seventh galley	The seventh galley was ordered in Malta	AOM 110, f. 106r, 7 August 1631; AOM 109, ff. 37v-39r, 22 September 1627, in Grima, "Galley Replacements," p. 57.	With additional costs (116 <i>scudi</i>), expenses added up to 40,466 <i>scudi</i> . Foundation had a total credit from interests amounting to 52,021 <i>scudi</i> thus leaving a balance of 11,523 <i>scudi</i> .

Command and Organization

Table 12 shows the command structure in the Order of Saint John's naval forces. There were a few rules that regulated how one was to advance, up the ranks in this system. According to the Order's statutes, every Knight Hospitaller had to participate in four *caravans* before he could hope for advancement. A *caravan* meant a period of at least six months' service on the galleys or one year on the *sailing warship* (after the beginning of the eighteenth century).¹¹⁵ Every galley carried about 30 such *caravanisti*. Each *caravanisti* on board was trusted with a task according to seniority. The *re di galera* was in charge of the 'services' of the Knights, including distributing medicines, inspecting weapons, and looking after the safety of the galley captain. The *cercamare* was responsible for sighting the enemy, maintaining the artillery, distributing the ammunition, and supervising the master gunner (*capomastro d'artiglieria*). The *re di galera* and *cercamare* had to be at least 25 years old and had to have attended two caravans during which they were declared proficient in their task.¹¹⁶ Other tasks depended on the skills of individuals, who had to perform as pilot, clerk or surgeon.¹¹⁷

TABLE 12.
Organization of the Order's naval command structure



In addition to the Knights, every galley carried a contingent of 50 to 200 troops, sailors and several skilled mariners to perform tasks pertaining to navigation and to life on board.¹¹⁸ The majority of the soldiers and sailors were recruited from the native Maltese population, but there were hundreds of such workers coming from all parts of the Mediterranean.¹¹⁹ Seagoing freemen were referred to as *Gente di Capo*,¹²⁰ and in general they comprised the officers, marine soldiers (servants-at-arms), sailors, gunners, and seamen.¹²¹

The captain-general of the squadron was, of course, on the *capitana* with his staff, including the captain of the *capitana*, the chief medical officer, the major or commanding officer of the marine soldiers' battalion, the *riveditore* or chief supply officer, and the prior (the senior chaplain on board).¹²² A Knight could become a galley captain at the age of 25, after the completion of his fourth caravan and after at least 10 years of membership in the Order.¹²³ An act of 1548 fixed the duration of office at two years for the galley captains, mainly because the captains who contributed to the maintenance costs could not afford the office for extended periods.¹²⁴

The first lieutenant of the squadron was second in command and was in command of the second galley, the *padrone*. The first lieutenant's main job was to supervise the galleys especially as they left or returned to their moorings.¹²⁵ He inspected the men's food, took complaints, and trained the men to use weapons. He had to sleep on board at all times, together with the duty officer or *ufficiale di fischietto*.¹²⁶

Other members of the crew included the *maestro scudiero* who read the orders to the crew,¹²⁷ the *comito*, or boatswain who supervised the rowing and the sailors,¹²⁸ *agozzino* who was personally accountable for the slaves and other rowers,¹²⁹ four *consiglieri* or councilors who read the sea charts, arranged the ballast and helped with the navigation,¹³⁰ and *aglieri* who were in charge of the galley's boats.¹³¹ In addition, there were young boys of about twelve years of age called *proeri* who joined the galleys as sailor aspirants to learn a sea trade.¹³² *Bombardieri*, the gunners (including the master gunner and adjutant), formed part of the sailors' group.¹³³ The *remolario* was in charge of the oars and *maestro d'ascia*: was the ship's carpenter. *Bottaro* (cooper), *calfato* (caulker), *barbarotto* (barber surgeon), galley chaplains, and the *buonavoglia* (volunteer rowers) made up the rest of the crew.

The remainder of the crew on a galley consisted of rowers (*ciurma*). The first type of rower was the *buonavoglia*, who sat at the end of the benches and controlled the oar. They were 'volunteers', numbering around 200 to 250 per galley, who accepted this position to erase their debts.¹³⁴ Similarly, the *forzati* were condemned by the local tribunals to serve a sentence of detention on the oars.¹³⁵ The third category was the slaves, ranging from 10 - 15 to 25 - 30 percent of the total number of galley rowers. These slaves were Muslims from ships captured by the Order's squadron or during attacks on land settlements. The slave rowers were chained to their benches at all times. Work conditions were, by any standards, atrocious as the rowers urinated and defecated into the bilge. In addition to biscuits and water, live animals were brought on board, adding significantly to the stench.¹³⁶

Decline of the Galley Squadron

The reasons for the decline of the galley squadron are complex and intertwined with a number of different developments. The events and changing trends that influenced the reduction in size of the galley squadron and the eventual elimination of the galleys completely by invading French forces were the result of issues that will be investigated in detail in the following chapters that analyze the function of the Order's naval forces and naval activities. Briefly stated, the major reason for galley squadron's decline is the technological developments in gun founding, especially iron casting. Widespread availability of reliable iron guns at low cost led to the development of fleets comprised of broadside-firing sailing warships as well as naval warfare tactics suitable for such fleets. The rise of nation states made it possible for countries to build and maintain such fleets and acquire control of the open seas with these new naval means. Galleys rapidly became obsolete weapons that were ineffective against such navies. Training young Knights to command galleys and the techniques of master galley warfare also became impractical, since it no longer contributed to their advancement in their own countries upon the end of their service with the Order of Saint John. The economy of Europe was also changing, and the size, wealth and number of *commanderies* were decreasing regularly, eliminating one of the most attractive reasons for young aristocrats to join the Order (i.e., appointment to manage a rich *commandery* in Europe). The decreasing number of new recruits meant decreased income for the Order. Moreover, the shrinking size of the *commanderies* and the diminishing *responsions* were creating additional financial stress. The worst situation was the drop in the number of prizes taken by the Order, eliminating an income source as well as the *raison d'être* of the Order in general. The decline of the Ottoman Empire and the introduction of the Dutch and English merchant ships into the Mediterranean meant that there were fewer targets for the

Order's ships to attack. The absence of frequent prizes also meant a shortage of slaves and an increase in the number of paid Maltese rowers, forcing a rise in operating costs.

The galley squadron was directly affected by fast-changing technological, political, social, economic, and religious conditions during the eighteenth century. Limited financial resources were spent to maintain the squadron of sailing warships. The magnates of the Order were questioning the validity of retaining the galleys at a time when other Mediterranean countries were discarding their galley squadrons. A report submitted to the Grandmaster in 1790 recommended drastic reductions in the number of personnel and the *ciurma*.¹³⁷ A desperate measure to cut costs was the introduction of the short galley in 1791.¹³⁸ We do not know for certain how this project progressed but it must have been a failure, since there were no short galleys in service by 1798.¹³⁹

The Squadron of Sailing Warships

The success of the Order's navy depended heavily on how well it kept its forces technologically equal or superior to those of its opponents (predominantly the Muslim settlements of North Africa). Therefore, efforts to construct a squadron of sailing warships started shortly after the adoption of the fully-rigged man-of-war by the Barbary corsairs in the mid-seventeenth century.¹⁴⁰ As the galleys could not operate during the winter, the Order was forced to integrate sailing warships into its naval forces in order to continue year-around activities.¹⁴¹

The first proposal for the construction of a sailing warship squadron was prepared during the magistracy of Martin de Redin (August 17, 1657 to February 6, 1660). Consequently, Grand Master Lascaris ordered the construction of a 50-gun ship in 1665, but this idea never materialized.¹⁴² On March 31, 1700, Grand Master Ramon Parellos proposed the introduction of sailing men-of-war, and stressed that it would be impossible to oppose the Barbary corsairs without a squadron of such ships.¹⁴³ On January 17, 1701, a commission nominated by the Grand Master examined the proposal and determined its overall efficiency and cost.¹⁴⁴ Finally, on April 15, 1701, a Papal Bull of Clement XI authorized the development of the sailing warship squadron (*Congregazione dei Vascelli*) and commissioned the Order to begin construction.¹⁴⁵

In the meantime, the galley squadron captured a Tunisian ship of 80 guns on August 14, 1701. This ship was called *Sultana Beringhemi* or *Sultana Binghen* and was manned by a large crew when it was captured.¹⁴⁶ We do not have a record of its Christian name, but it is known that the Order kept this ship as the first sailing warship of the new squadron.¹⁴⁷

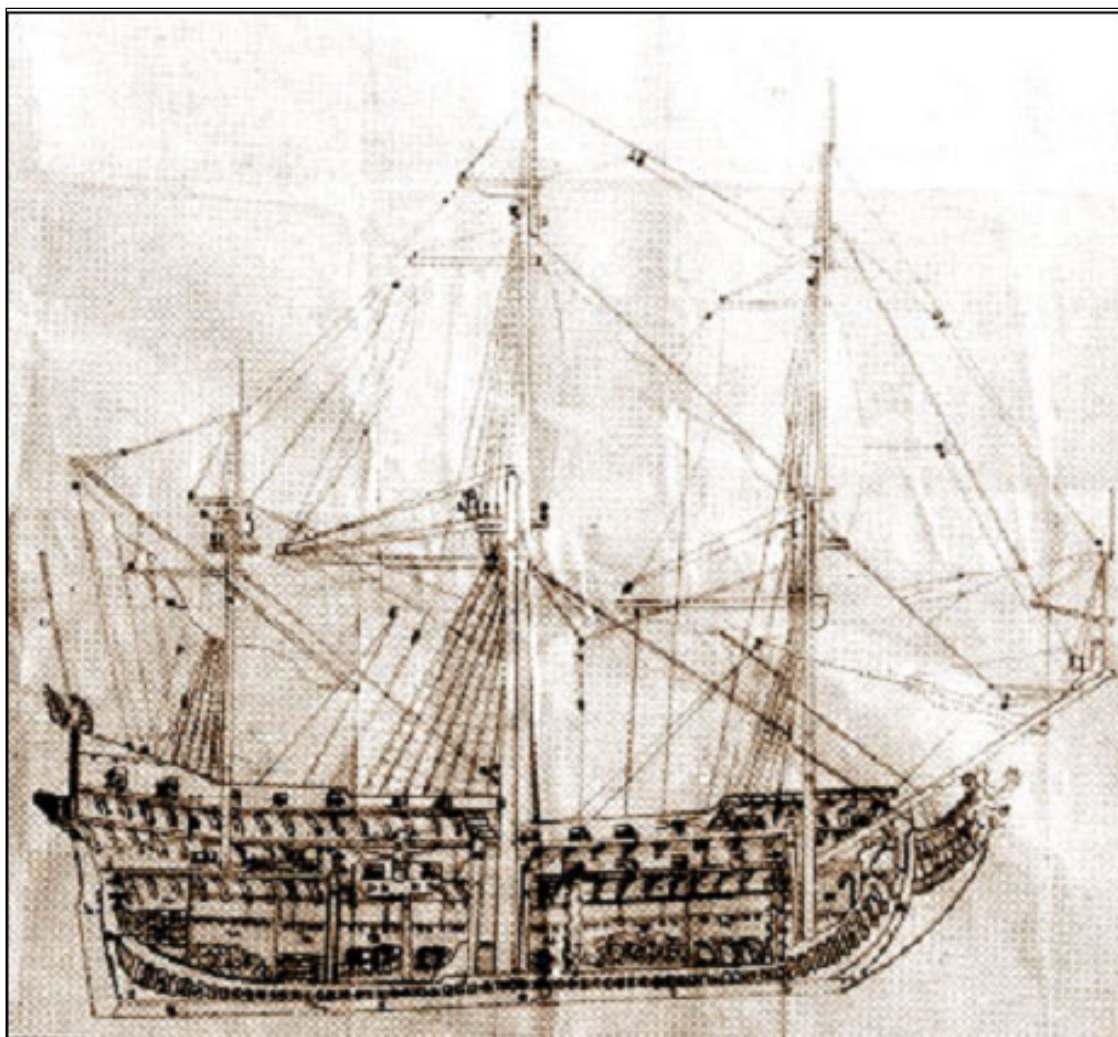


Fig. 27. The cross-sectional view and the rigging plan of a sailing warship from 1729 (NLM 138 f. 208). (after: Wismayer).

Malta did not have shipyards capable of building large sailing ships. Thus, foreign arsenals were commissioned for the construction the first ships of the *Congregazione dei Vascelli*. Construction of *San Giovanni I* and *San Giacomo* started in Toulon on April 26, 1702.¹⁴⁸ On the very same day, the construction of stores for the *vascelli* began in Malta outside Senglea gate.¹⁴⁹ Once *San Giovanni I* and *San Giacomo* were completed, they sailed to Malta in 1704.¹⁵⁰ For detailed information about the specific features and ratings of the ships see Table 13 and Figure 27.

TABLE 13.
Ships of the Sailing Men-of-war Squadron used and/or built by the Order of Saint John between 1700 and 1798

Ship's Name	Type	Time of commission	Place of construction	Guns	Crew	Dimensions in meters	Shipwright	Details	Visual Material
<i>San Giovanni Battista</i>		1700-1716	N. Europe ? Imported by the Ottomans	80 (Dauber)				Captured ship <i>Sultana Berenghieri</i> or <i>Binghen</i>	
<i>San Giovanni Battista I</i>	Third Rate (Flagship)	1704-1716	Toulon	64 (Wisnayer)	400	L: 44 B: 12 D: 8.7	Coulomb family		
<i>San Giacomo</i>	Third Rate	1704-1718	Toulon	54 (Dauber) 64 (Wisnayer)	400 (380 + 12 officers)	L: 42.18 B: 11.38 D: 5.36	Coulomb family		Model in Zabbar
<i>La Santissima Vergine del Pilare</i> <i>San Giuseppe</i>	Frigate	1704-1708 1710-? (Ubaldo)	Malta	Intended for 40 guns but only had 18 (bad design)	186 + 12 officers		Canno (Maltese)	Gift of Grandmaster Peneblos y Roccaful	
<i>Santa Caterina</i>	Third Rate	1705-1721	Malta	54 (Dauber) 54 (Wisnayer)	400 (380 + 12 officers)	L: 42.18 B: 11.38 D: 5.36			Painting
<i>Santa Croce</i> or <i>San Raimondo</i>	Frigate	1710-1718 1706-1718 (Wisnayer)	Tunisian ship captured	46 (Rossi) 50 (Wisnayer)	316 (Rossi)			Captured in 1706 <i>Rosa di Tunisi</i> (Tunisian)	
<i>San Giovanni Battista II</i>	Third Rate (Flagship)	1718-1765	Toulon	64 (Wisnayer)	400 (440 + 14 officers)	L: 47 B: 13 D: 5.35	Coulomb family		
<i>San Giorgio</i>	Third Rate	1719-1723	Malta	60 (Dauber) 64 (Wisnayer)	330 300 (Muscat)	L: 40.56 B: 11.35 D: 5.35	Coulomb family	Captured the Algerian <i>Solo d'Oro</i> and Tunisian <i>Porosopano</i>	Painting

TABLE 13. — *Continued*

Ship's Name	Type	Time of commission	Place of construction	Guns	Crew	Dimensions in meters	Ship-wright	Details	Visual Material
<i>San Vincenzo</i>	Frigate	1723-1768 1720-1769 (Wisnayer)	Malta	52 (Dauber) 50 (Rossi) 50 (Wisnayer)	332 (400+11 officers)	L: 36.87 B: 10.49 WIS 267	Coulomb	Captured the <i>Padovana di Tripoli</i> in 1723 and later captured the Algerian ship <i>La Gazelle</i> in 1729 in both cases with the help of the flagship <i>San Giovanni</i> .	Painting
<i>San Antonio di Padua</i> (or <i>Padova</i>)	Frigate	1727-1752 1727-1765 (Wisnayer)	Malta	52 (Dauber) 60 (Rossi) 64 (Wisnayer)	333	L: 40.56 B: 11.35 D: 5.35	Blaise Coulomb	Also served as flagship (1735-1753). Was part of the French fleet against Tunis in 1752.	
<i>San Francesco di Paola</i>	Corvette	1733-1739		30 (Dauber)					
<i>Santa Teresa</i>	Corvette	1733-1736	Malta	20 (Dauber)	174+ officers		Agostino Scolaro (Maltese)	Gift of Grandmaster Fra Don Antonio Manoel de Villena	
<i>San Salvatore</i>	Third Rate	1780	Ottoman ship	70 bronze guns	108		Maire Bone	Captured from the Ottomans	
<i>San Giovanni Battista III</i>	Third Rate	1755-1765	Malta	64 (Dauber)					
<i>San Giacomo Nuovo</i> (or <i>San Giacomo II</i>)	Third Rate	1765-1780 1770-1780 (Wisnayer)	Malta	64 (Dauber)		L: 45m B: 12m D: 5.6m	Agostino and Giuseppe Scolaro (Maltese)	Built of the timbers of the <i>San Giovanni Battista III</i> . Sold to the king of Naples (Ubaldo).	
<i>San Zaccaria</i> (or <i>Zacharia</i>)	Third Rate	1765-1798	Malta	64 (Dauber)	(400+10 officers)		Agostino and Giuseppe Scolaro (Maltese)	Replaced the <i>S. Giovanni</i> when it was sold. In 1798 the ship was transferred to the French Navy and named <i>Dago</i> and was in use until 1800.	

TABLE 13. — *Continued*

Ship's Name	Type	Time of commission	Place of construction	Guns	Crew	Dimensions in meters	Shipwright	Details	Visual Material
<i>San Giovanni Battista IV</i>	Third Rate	1765-1780 1788-1780 (Wismayer)	Malta	64 (Danber)	9 officer knights + 522 Standing officers and men		Agostino and Giuseppe Scolaro (Maltese)	Sold for economic reasons to the King of Naples (King of Two Sicilies or King of Spain) in 1780	
<i>Santa Maria</i> (or <i>S. Zaccaria</i>)	Frigate	1765-1798		36 (Danber)				Became <i>Berouise</i> in the French Fleet (Wismayer)	
<i>San Giovanni Battista V</i>	Third Rate (Flagship)	1781-1789 1792-1798	Malta		Finished and armed by the French		Giuseppe Maurin (Maltese - trained in France)	Named <i>Athenes</i> in the French Fleet (Wismayer)	
<i>Santa Elisabetta</i>	Frigate	1782-1798	Malta					Became <i>Cartaginese</i> or <i>Cartaginoise</i> in the French Fleet.	
<i>Santa Caterina</i>	Frigate	1785-1791	Malta				Agostino Scolaro (Maltese)		
<i>San Pietro</i>	Xebec								
<i>San Paolo</i>	Xebec								

Not surprisingly, Maltese shipbuilding developed close ties with France at a time when the French *Langue* emerged to prominence in the Order.¹⁵¹ Of the period during which the sailing warships were in use (1700-1798), 200 out of 300 resident Knights were French. Therefore, shipbuilding was largely carried out following French standards, and the first two ships were built in Toulon by the renowned shipwrights of the Coulomb family.¹⁵²

In the late seventeenth century, schools of naval construction were founded in Rochefort, Brest, Marseille, and Toulon in order to standardize shipbuilding in France.¹⁵³ The naval construction school in Toulon was under the direction of Francois Coulomb (1654-1717), son of the renowned shipwright Laurent Coulomb. Francois Coulomb built 25 vessels, fourth, third, second, and first rates, in Toulon between 1689 and 1705 and also compiled a manuscript on the design and construction of ships titled *Livre de construction des vaisseaux conteneant le nom des pieces, leurs liaisons, et les proportions generales de la masture comme aussy pour les flottes et chaloupes, a Toulon 1683 par Coulomb fils Maitre constructeur des vaisseaux du Roy dans l'Escole de la construction*.¹⁵⁴ François Coulomb and his son Blaise were also the master shipwrights responsible for construction of the first two ships of the Order to be launched in 1704: *San Giovanni* and *San Giacomo*.¹⁵⁵

During the same period, new shipyards were built in the French Creek in Malta.¹⁵⁶ The first sailing warships built in Malta were *Santa Caterina* and *San Giuseppe*. They were designed and built by local shipwrights who were only experienced in galley construction.¹⁵⁷ Therefore, these first trials were not successful: the ships were not good sailors and had a shorter-than-usual lifespan.¹⁵⁸

After construction of the first two men-of-war in Toulon, sailing vessels were also built in Malta. Blaise Coulomb and his two sons went to Malta to oversee construction of the next

generation of ships in the new shipyards of the French Creek and to train local shipwrights.¹⁵⁹ During their stay in Malta, the Coulombs were the master shipwrights for *San Giovanni Battista II*, *San Giorgio*, *San Vincenzo*, and *Sant' Antonio da Padova*. Table 14 provides an approximate operational timeline for the ships of the men-of-war squadron of the Order, and includes all the ships employed by the Order during the period between 1700 and 1798.

It is also important to note the custom of giving the same name of a decommissioned ship to its replacement. This tradition applied especially to flagships, and thus there was a total of four flagships named *San Giovanni*.¹⁶⁰ There is not much information about every one of these ships, with the exception of *San Giovanni II* (1716-1765), for which there is a substantial amount of textual information. A reconstruction of this particular ship based on the surviving information is provided in Appendix C.

TABLE 14.
Ships forming the squadron of the sailing warships

1700	-----1798		
	SAN GIOVANNI II		
	SAN RAIMONDO	SAN VINCENZO	San Giovanni IV
	San Giuseppe	San Giorgio	San Giovanni III
	SANTA CATERINA		SAN ZACHARIA
	SAN GIACOMO		SAN GIOACCHINO
SAN GIOVANNI I	SAN ANTONIO DI PADUA		SAN SALVATORE

Because of the relatively late adoption of this type of warship, as well as the overall economic decline of the Order of Saint John in Malta, the sailing warship squadron never developed beyond a small and ineffective fleet. The total number of men-of-war employed by the Order throughout the eighteenth century was only twenty, the number of ships forming the squadron averaged four and only on one occasion did it reach the maximum number of five (Table 14). A quick look at the size of contemporary fleets makes it clear that both the size of the individual ships and the size of a squadron comprised of four or five ships presented an extraordinarily small squadron within the context of the eighteenth century (see Table 15 below for the sizes of the other fleets). It is also important to note that these sailing warships, *vascelli*, used by the Order are sometimes referred to as the ‘third-rates’ in the literature. However, these would normally qualify as fourth rates in the other contemporary fleets.

TABLE 15.
Numbers of ships in the major European fleets in the eighteenth century – compared with the fleet of the Order of Saint John¹⁶¹

Rates	Artillery	Ottoman Empire	Venice	France	England	Spain	Order of Saint John
First	90-	4		1	6	1	
Second	80-90				10	2	
Third	65-80	11	9	12	33	9	
Fourth	50-64	12	2	25	54	31	3
Fifth	31-46	6	2	8	17	2	
Sixth	20-30			3	20	4	
Total		33	13	49	140	49	3

Another likely reason for the introduction and maintenance of the squadron of sailing warships was the naval training function that the Order provided. Even if it were just a miniature version of contemporary naval fleets, the Order’s squadron of sailing vessels could provide

training for aspiring Knights, who would be interested in benefiting from their experience in Malta in order to excel in their respective countries upon their return (see Chapter XI, section about Naval Training). In all, the persistence of the sailing ships, and the gradual increase in their numbers at the expense of the galley squadron indicate that the squadron of the *vascelli* accomplished its function of extending the survival of the Order to the end of the eighteenth century.

CHAPTER XI

NAVAL FUNCTIONS OF THE ORDER OF SAINT JOHN

When he offered Malta to the Knights in 1523, Charles V proposed three functions for the Order: to provide an additional naval base for Spanish fleets, to resist Ottoman aggression, and to defend its own territory against pirate attacks.¹ Placing the Order at the middle of the navigation routes of the central Mediterranean was also a subtle political move in anticipation of the Franco-Ottoman naval alliance being negotiated in the 1520's.²

The Order was expected to meet its obligations by sending its navy on two or three cruises annually and joining the Christian navies when they were engaged in battle against the Muslims. It was against the neutral position adopted by the Order's squadron to openly take sides in conflicts between Christian countries. Nonetheless, the Knights occasionally took part in such encounters. For example, the *Gran Galeone*, built for the Order in Amsterdam in 1617, joined the forces of Louis XIII fighting the Protestant Huguenots at La Rochelle in 1622-1623.³

It was also common for the galley squadron or the sailing warships to escort privileged travelers such as high-ranking officers, members of European royal families, or important ecclesiastical dignitaries, as well as commercial cargo ships, especially those transporting grain, shipbuilding timber, or annual shipments of *responsions* from the *commanderies* to Malta.⁴

The Order's navy was also an institution performing the duty of naval training for aspiring knights. Many of those who completed their *caravans* serving the squadron of the Order returned to their countries of origin where they joined the national navies as well-trained and seasoned warriors.⁵ A report by Barras de la Penne, dated 1727, mentions that at the end of

the seventeenth century about a third of all the officers in the French galleys were Knight of Saint John and former servants-at-arms of the Order.⁶ There were also several Knights in the Spanish, Portuguese, and Austrian navies.⁷

The sections below provide detailed information about how the Order performed the functions briefly described above and the specific occasions where the Order's naval forces were employed. The activities of the period between 1530 and 1798 will be investigated in two main sections. The first is titled 'naval expeditions' as the emphasis will be on the activities of the Order's fleet in conjunction with larger Christian fleets. What differentiates these operations from the second group, identified as the 'corsair operations', is the ultimate objective of the expedition. 'Naval expeditions' were not carried out with the goal of capturing prizes or acquiring financial rewards. These two categories are sometimes difficult to differentiate, as the 'corsair operations' were also carried out with the pretext of causing harm to the 'enemy', which would be the Muslim ships, Muslim coastal settlements, and other ships carrying Muslim goods.⁸ That all operations in this category resulted in the capture of prizes with a financial value qualify them as privateering.

Naval Expeditions

During the first decades of the Order's presence in Malta, the prospect of recapturing Rhodes characterized the organization of military operations. As part of this grand plan, the Order's forces attacked Modon in 1531, only one year after their arrival in Malta.⁹ Modon was chosen as the target of the expedition because of its proximity to Rhodes, and because it was a small and inadequately fortified settlement. The plan was to utilize this port as a base from which to stage a large-scale attack on Rhodes. The naval forces that attacked Modon consisted of two of the Order's galleys and two additional galleys hired by the Grandmaster from a famous privateer, Cigale. The fleet was accompanied by two brigantines and two merchant ships carrying provisions. The assailants were able to enter the settlement without any major difficulties but a report about the approaching Ottoman patrol fleet forced them to retreat.¹⁰ Having no other options, the Order's forces, and the corsairs allied with them, decided to carry away whatever they could find in the settlement. The plunder described as "not over-honorable, tho' profitable" by a contemporary historian of the Order, Abbé de Vertot, resulted in the slaughter of the male population and the enslavement of 800 women from Modon.¹¹

The position taken by the Republic of Venice became clear during this expedition. The Dodge refused to provide ship's biscuit for the besieging fleet of the Order and retained its neutral role. Shortly after the sack of Modon, in 1534, the Venetian *Provveditore dell'Armata* issued instructions to chase down all Maltese corsairs.¹²

Similar unsuccessful attempts of an even smaller scale were carried out in the years to follow but the project of recapturing Rhodes was completely abandoned by the mid-sixteenth century. The major reasons for this were the increased financial difficulties caused by Henry VIII in 1534 when he seized the Order's English *commanderies*,¹³ and the sack of Gozo by the

North African corsairs in 1541 while the Order's ships were engaged with the fleet of Charles V in the Siege of Algiers.¹⁴ The increasing need to fortify the Maltese Islands and the fact that it was becoming clear that the re-conquest of Rhodes was not viable forced the Order to recognize that Malta would be their permanent home.¹⁵ Defending Tripoli, given to the Order as part of the compensation package from Charles V in 1530, was a great military liability and a drain on the Order's resources. The defenders presented very little resistance to the Ottoman attackers under the command of Sinan Pasha in 1551, and the loss of this fortress was a great relief to the Order's finances that could finally be dedicated to the fortification of Malta.¹⁶ On the other hand, although Tripoli was not a valuable asset to the Order its capture considerably strengthened the Ottoman position in North Africa, as this was not only a strategic military position and a link with the Barbary States, but also a traditional port through which the African interior was reached.¹⁷

The balance of power in the Mediterranean was in constant flux during the sixteenth century, creating an uneasy situation for the small fleet of the Order in Malta. The Barbary Corsair Khairaddin Barbarossa established his base in Algiers in 1530, and became the admiral of the Ottoman navy in 1533, adding to the increasing pressure of Ottoman control of the central Mediterranean felt by the Order. In the meantime, the conquest of Baghdad and Tabriz led to increased Ottoman control over the silk route and, therefore, Mediterranean trade and politics. The growing power, expanding frontiers and increasing wealth of the Ottoman Empire led to the creation of a Franco-Ottoman alliance in 1534, which lasted for 25 years. During the period of active cooperation between the French and Ottoman fleets between 1542 and 1544, Ottoman ships became a familiar sight in the central and western Mediterranean, often wintering in Toulon.¹⁸ The Third Ottoman-Venetian War (1537-1540) also had significant consequences for the second half of the century. After the major naval encounter of 1538 at the Battle of Prevesa,

Venice abandoned the Christian league that consisted of the Papal State, Genoa, Spain and Venice, and sued for peace, loosing its Aegean islands.¹⁹ Not only did the combined forces of the Franco-Ottoman alliance take to plundering the Catalan coast after this date, but the absence of any sizeable force to subdue piracy in the Mediterranean led to the rise of Muslim piracy, especially between 1538 and 1570.

The sixteenth century was characterized by Portuguese expansion into the Indian Ocean and increased Spanish and Portuguese interests in the Atlantic trade. The Ottoman Empire was involved in fighting the Portuguese to protect its interests in the Indian Ocean and expanded into Europe by annexing Hungary in 1541. Although the spice trade of the Mediterranean was not ultimately affected by this Portuguese expansion, Venice was becoming increasingly concerned about the commercial rivalry presented by the Adriatic city of Ragusa, which controlled the land route to Constantinople, as well as the Uskok pirates who raided Venetian shipping from their base in Quarnaro.²⁰

The fact that the Order of Saint John continued its corsair activities (see Chapter XI, section about Corsair Operations) and regular patrolling cruises (*caravans*) was undoubtedly an insignificant detail in a larger deluge of events. However, the Order's galley squadron, consisting of four ships, is known to have been part of a number of combined Christian fleets fighting the Ottoman Empire. After the failure of the first two efforts at Prevesa (1538) and Algiers (1541), another attack was organized by Philip II to capture Djerba in 1560. The expedition was planned as a counterattack against the Ottoman expansion in North Africa and the western Mediterranean that resulted in the capture of Oran (1556), Bizerta (1557), Ciudadela on Minorca (1558), Bougie (1559), and Djerba (1559).

The Treaty of Cateau Cambresis between Spain and France in 1559, and the death of Mary Tudor that ended the alliance between England and Spain, together halted the Valois-Habsburg Wars. The most important consequence of the end of hostilities between Spain and France was the simultaneous termination of the Franco-Ottoman alliance. The Ottoman fleet could no longer winter in French ports and could not intervene in the affairs of the western Mediterranean with any speed or efficiency. Philip II counted on this advantageous position when he attacked Djerba in 1560, and the Ottoman Empire, intending to counter this move responded by attacking Malta in 1565. In both cases the attackers suffered the greatest losses.

The Order contributed five galleys, two galleons, one *magistral* galliot, and a force of 400 Knights and 900 soldiers under the command of Carlo Tessieres to Philip II's Djerba expedition.²¹ The Christian fleet consisted of 49 to 54 galleys. At the end of the disastrous expedition, 28 to 30 of these ships were lost, including the *Capitanas* of the Pope, Sicily, Monaco, and Terranova. But the real importance of the defeat at Djerba for the Christian alliance was the loss of an entire generation of experienced fighting men. Thousands of officers, sailors and seasoned marines were killed in this expedition, crippling the effective exercise of power at sea for Spain and its allies.²²

The Porte had to act fast to take advantage of the extraordinarily weak state of the Spanish fleet.²³ An Ottoman force of 130 galleys, 18 galliots, 8 maonas (large merchant galley), 11 large sailing ships, and about 36,000 soldiers attacked the Order's base in Malta in 1565. The Order had about 2,500 men and the islands' male Maltese population numbered about 6,000 at the time. Nonetheless, due to various problems within the Ottoman command structure, a staunch defense displayed by the Knights, and the arrival of a relief force of Spanish and Genoese galleys carrying 11,000 men caused the Ottomans to abandon the siege and return home empty handed.

In its broader Mediterranean context the magnitude and consequences of the Ottoman siege of Malta were ephemeral.²⁴ Hess notes that “the Ottoman naval strength remained as formidable, its determination to realize its grand design as powerful, and its threat to the West as fearful as they had been in their totality before the armada had ventured on its politico-punitive expedition to Hospitaller Malta.”²⁵ The fact that the Order survived the attack did not put an end to the Ottoman threat.²⁶ On the other hand, the siege of Malta had an undeniable impact within the narrower context of the history of the Order of Saint John and the social and economic history of Malta. The most permanent significance of this ‘close call’ was the Knights’ realization of the extent of their vulnerability. The area of the Three Cities on the eastern side of Grand Harbor and Fort Saint Elmo on Dragut Point had proven especially vulnerable to battering from Ottoman artillery set up on the heights of the Sciberras peninsula. Consequently the Knights decided to build a fortified enclave on those heights, a settlement that was to be named Valletta (Fig. 2). When the project was completed, Grand Harbor was ringed by fortresses and ready to repel any further attacks.²⁷ Ironically, the only attack on Malta after this date was that of Napoleon in 1798, when the Knights surrendered with no opposition. The only real impact of this giant construction project was a great drain on the Order’s fiscal resources, and the decimation of the islands’ indigenous population (see Chapter XII).²⁸

The Dutch war of independence against Spain was the defining military event for Spain between 1568 and 1648. The Ottoman Empire, on the other hand, was fighting on four fronts, against the Muscovites and Iranians in Kazan and Astrakhan, against the Portuguese in the Indian Ocean, against the Holy Roman Empire in Central Europe and against Spain and Venice in the Mediterranean. Another Franco-Ottoman pact came into existence in 1569 with the initiation of the Franco-Ottoman capitulations, granting to France all the commercial privileges previously granted to Venice. As a result, Marseilles emerged as a major commercial center, threatening the crucial economic role played by Venice. The outbreak of a Moorish rebellion in Andalusia in 1568 created considerable civil unrest in Spain and presented the Ottomans with the opportunity to attack Cyprus in 1570, as Venice would have to defend the island with limited support from Europe.²⁹ The most significant encounter of the conflict, called the fourth Ottoman-Venetian War or the War of Cyprus (1570-1573), was the naval battle at Lepanto in 1571.

The Ottoman fleet laid siege to Venetian Cyprus in 1569 and captured the main port of Crete (Candia) from the Venetians in 1570. The fleet of the Holy League consisting of 207 galleys from Spain, the Papal States, Venice, and the Order of Saint John finally encountered the Ottoman fleet of 230 galleys near Lepanto in 1571. At the end of the day, the Ottomans retreated having lost 30,000 men and many ships. The Knights contributed only three galleys, under the command of Pietro Giustiniani, but they played a pivotal role in the capture of the Ottoman flagship.³⁰ Christians decisively defeated the Ottomans at Lepanto; ironically, the results of military operations between 1569 and 1571 improved the strategic position of the Ottoman Empire: the Holy League disintegrated after the death of the Pope in 1572 and Venice sued for peace in 1573, leaving Cyprus to the Ottomans. From the Ottoman point of view, eastern Mediterranean was now cleared of the Christian stronghold at Cyprus, which

consolidated their control of the sea routes that joined the wealthiest of the imperial lands (Egypt) to Constantinople.³¹ The Ottoman fleet also recovered quickly, reaching 200 galleys within two years and supporting their fleet with numerous galleasses, whose absence may have been the determining factor for the defeat at Lepanto.³²

Therefore, the absence of any major conflicts in the Mediterranean after the Battle of Lepanto cannot be explained away by the weakness of the Ottoman fleet. Other developments such as the Catholic-Huguenot conflict in France, which culminated in the Saint Bartholomew's Day Massacre of 1572, the bankruptcy of Spain in 1575, and the subsequent defeat of the Spanish Armada in 1588, the outbreak of plague in Venice killing one third of the population (1575-1577), and the start of war on the eastern front of the Ottoman empire with the Sassanids, left the issue of Mediterranean supremacy unresolved. Instead, an environment of equilibrium was created as the attention of the major naval powers were diverted from the Mediterranean by other, more pressing problems elsewhere. The period that followed was characterized by the spread of piracy and a slow-burning war between corsairs, the major parties being the Knights Hospitallers and the Barbary Corsairs.³³ In addition, we see new players being introduced with the arrival of the first Dutch and English merchant and naval ships in the Mediterranean in the 1580s.³⁴

Algiers became autonomous in 1575 and, in 1594, the Porte issued a *ferman* (decree) to the governors of Algiers and two other provinces, permitting them unlimited corsair activity.³⁵ From the beginning of the seventeenth century onwards the Order's squadron very rarely took part in any Christian alliance or in any activity that was not mainly motivated by the desire to capture a prize. Another reason why these activities can be defined as 'corsair activities' is that most often the Order's hostility was directed at unarmed targets, such as settlements, merchant ships, and fishing boats, purely for the purpose of capturing slaves or goods for sale to rebuild the treasury (see Chapter XI, Corsair Operations).

The only instances in which the Order was involved in activities with military motives was when the six galley forming their squadron joined the Venetian fleet during the War of Crete (1645-1669).³⁶ The unusually long duration of this war was to exhaust Venice and the Order, as the former was prevented from carrying out its regular trade and the latter's squadron was tied up in Crete, unable to capture prizes, depriving the Knights of income.³⁷ At the end of the war, the Venetians surrendered Crete to the Ottomans and were reduced to an Adriatic power. The real beneficiaries of this conflict were the Dutch and English merchants who soon replaced the Venetians in exchanging their woolen cloths for raw silks from the Ottoman Empire.³⁸ Also coinciding with the War of Crete was the confiscation of the Dutch *commanderies* in 1649, further increasing the financial distress of the Order.³⁹ The Venetians were once again joined by the Order's seven galleys during the First War of Morea (1684-1699).⁴⁰ And once again, the disadvantages of being involved in a lengthy conflict negatively effected the finances of the Order.

The last occasion in which the Order's squadron might have been partly motivated by military matters was probably the bizarre situation of 1755-1756.⁴¹ In 1755, the Bey of Tunis requested Grandmaster Pinto's help to defend his city against the Bey of Algiers. Consequently,

the galley squadron consisting of the *Capitana*, the magistral galley of Pinto, *San Luigi* and *San Nicola* accompanied by two sailing warships *San Antonio* and *San Giovanni* (both 64 guns) were sent to Tunis under the command of the Captain General Bailiff Fra De Rosset Fleury. At the Grandmaster's request, the squadron was also accompanied by the thirteen merchant ships (from Denmark, Sweden and Holland) that happened to be in the Grand harbor at the time, so that the 'armada' would look larger. The arrival of this seemingly large fleet caused the Algerians to refrain from attacking Tunis by sea, but it was nonetheless captured by land 50 days after the arrival of the Order's squadron. During their stay in the nearby bay of La Goleta, the fleet was provisioned by the Bey of Tunis with whom the Captain General exchanged expensive gifts. After the fall of Tunis, the Order's ships captured the Tunisian ships that were also at anchor at La Goleta and kindly transported the Tunisians to Malta as passengers.

After this date, almost all the activities of the fleet consist of performing annual patrols but capturing a dramatically decreasing number of prizes (see Chapter XI, section about Corsair Operations). In 1769, the only recorded activity of the galley squadron was its performance of some complicated maneuvers for the entertainment of the King and Queen of Naples, his consort the Grand Duchess, the Ambassador of France and his wife, and two other princesses who were friends of the Grand Duchess of Tuscany, thereby helping Grandmaster de Rohan to befriend royalty.⁴² In 1770, three galleys accompanied the French fleet to Tunisia where they bombarded Sousse and Bizerta.

Corsair Operations

The Knights believed that it was their duty to police the Mediterranean and to fight the ‘Turks’, but the definition of ‘Turk’ was problematic throughout the existence of the Order of Saint John. As far as the Order was concerned, all Ottoman ships belonging to the Barbary regencies, as well as all European ships that carried Muslim and Jewish passengers or commercial merchandise with a port of origin or port of destination in the Ottoman territories, were ‘Turks’.⁴³ Therefore, entire ships had to be searched in order to determine whether or not it was ‘Turkish’ and the Order insisted on the right to search all ships sailing in the Mediterranean as their fourth vow obliged them to fight Muslim forces always and everywhere.⁴⁴ Naturally, these activities were highly unpopular among the subjects of other Mediterranean countries.⁴⁵ The religious justification for the activities of the Order were based on the harm inflicted on Muslim subjects and trade since commerce raiding ultimately took a financial toll on states. As outlined in the previous chapter, the general military and economic climate of the Mediterranean led the Knights to grow bolder in their commerce raiding.⁴⁶ The income derived through the capture of prizes became increasingly vital to the finances of the Order as revenue from the *commanderies* gradually decreased.

As briefly outlined in the previous section, the seventeenth century was characterized by a demographic crisis due to catastrophic mortality during the outbreaks of plague and a commercial crisis due to the growing dominance of the ships of Atlantic Europe.⁴⁷ Corsairing emerged as a profession adopted by the increasingly impoverished Mediterranean population of the seventeenth century.⁴⁸ In contrast, the eighteenth century was also a golden age of international commerce.⁴⁹ The Dutch had successfully monopolized the spice trade in the East Indies, and Holland and England increasingly flooded Mediterranean markets with cheap

manufactured goods. The economic crisis created masses of poor who, in turn, increasingly leaned towards banditry and its maritime counterpart, corsairing; outright banditry at sea could be easily camouflaged as 'holy war' when conducted under the flag of the Order.⁵⁰

A corsair or privateer is a private individual licensed by his sovereign to fit out a ship to attack his sovereign's enemies. The prizes he acquired while carrying out his actions are his to keep except for the share paid to the sovereign.⁵¹ The crews of the prize ships and the inhabitants of the settlements attacked in raids by the Order's ships were also a vital source for slaves, large numbers of whom were required to continue construction activities in Malta and man the oars in the galley squadron. Privateering activities were carefully regulated by the Grandmaster and the Council. All privateers flying the flag of the Order needed a letter issued by the Grandmaster and disputes over profits were adjudicated before special courts set up by the Knights. The *Tribunale degli Armamenti* was intended as a prize court to be responsible for the organization and jurisdiction of all privateers in Malta. It was instituted on June 17, 1605, and was composed of five commissioners nominated by the Grandmaster.⁵² A second institution, *Consolato del Mare* (established in 1697) was originally intended for litigation over regular maritime commerce. Both the small scale of the regular trade and the ever increasing corsair activity led to the genesis of this institution into one similar to the *Tribunale degli Armamenti*. By the beginning of the eighteenth century, the *Consolato del Mare* was in charge of the organization, regulation, and supervision of all corsair activities in Malta.⁵³ It was also a prize-court to hear cases concerning corsairs flying the magisterial flag, which the Grandmaster issued to privateers in his capacity as the Sovereign Prince of the island.⁵⁴

Historical documents indicate that aspiring captains of corsair ships would send their petitions specifying the proposed area of corsair activity to the *Tribunale degli Armamenti* asking to enroll a crew for their ships.⁵⁵ Permissions were granted for periods ranging from one

season (five to six months) to a period of five or six years.⁵⁶ Before he was permitted to fly the flag of the Order, the captain was also required to give his word under oath not to attack Christian ships, deposit a bond of 1,000 *scudi* (to pay for damages in case he broke his oath) and pay a fee of 50 *scudi* for the right of hoisting the flag.⁵⁷ Upon arrival of prizes in Malta, the experts from the arsenal determined the value of the inventoried items and determined the percentage to be paid to the Grandmaster. The rest of the prize money was distributed among the owner of the ship and its crew. There also were financiers who would pay reduced cash immediately after the determination of the prize for those who did not want to wait for the forty-days quarantine period before the captured goods were allowed to be exchanged in Maltese markets.⁵⁸

The most common ‘items’ listed as the subjects of these commercial interactions and the most common types of prizes were slaves and ships (see Appendix E). Slave prices varied between 8 and 320 *scudi* per slave, depending on the age, strength and physical beauty of the individual.⁵⁹ It is hard to determine the individual price of a slave as they were generally auctioned in groups.⁶⁰ It should also be noted that Christians captured by corsairs were considered prisoners of war, and they served as slaves unless ransomed.⁶¹ Prices of some of the small types of vessels captured and sold are presented in Table 16.

TABLE 16.

Prices for the sale of the captured prizes in Malta as of 1662, based on a document NAMRPS (*National Archives Mdina - Registro delle Prese e Schiavi* [register of prizes and slaves])⁶²

Saica	640-1311 <i>scudi</i> (depending on its size)
Petacchio	3,000-4,000 <i>scudi</i>
Galliot	550 <i>scudi</i>
Carabo (or garbo)	200-300 <i>scudi</i>

Privateering generated such profits that the definition of ‘the enemy’ proved increasingly vague over time.⁶³ The vessels legalized by the Knights mainly assaulted Muslim and Jewish merchants but attacks on Greek Orthodox or Latin Christian ships were also common.⁶⁴ Two pretexts were adduced for crossing the line into purportedly forbidden territory. At times, a war between alliances of Christian states afforded the privateers an opportunity to prey on Christian ships belonging to a Christian State in a rival alliance. At other times, privateers used the excuse that Christian vessels might be smuggling Muslim or Jewish goods on board. The admission that such was the case was not infrequently beaten out of the boarded ship’s commander.⁶⁵

Why Was Corsairing Allowed?

Fontenay’s evaluation shows that in the eighteenth century a total of 218 Hospitaller privateers were based in Malta. Only 70 of these were ‘Maltese’ and another 30 had foreign owners ‘resident in Malta’. The ships in these two categories make up only 46 percent of the total number of the privateers operating from Malta, meaning that the majority of the privateers belonged to the Knights themselves.⁶⁶

The Order allowed and encouraged corsairs because the *corso* was an integral part of the naval squadron and an important source of trained seamen.⁶⁷ In addition, corsairing activities not only provided employment for the rapidly increasing population of the archipelago but also the Grandmasters understood the value of directing aggressive activity outward to avoid local turbulence. Besides, the financial profits that corsairing brought were indispensable to the economy of the island that was otherwise sterile of opportunity.⁶⁸ The figures provided by the Quarantine registers reveal that 338 prizes were brought to Malta between 1654 and 1694, an average of eight prizes annually.⁶⁹ Ironically, because the Knights based their economy on preying upon Muslim trade, they became dependent upon the commercial welfare of the

Ottoman Empire. With the collapse of the Ottoman economy and weakening of the North African regencies in the eighteenth century, the Order also lost one of its most important income sources, as well as the political and ideological justification for its existence.

Why Were Corsairs of Malta Unpopular?

Mediterranean trade was virtually impossible without the involvement of Muslim and Jewish merchants in one way or the other. Shipments of spices, textiles and other oriental goods all originated from Muslim ports in the Eastern Mediterranean, usually in Alexandria or on the Levantine coast. Goods would generally be pre-purchased by a European merchant and became his property before they were shipped. But with obscure or broad definitions, these goods fell in the category of 'Muslim goods' quite readily. Both the Order and licensed corsairs systematically searched Christian ships for 'contraband' merchandise, which could be confiscated upon discovery. The ideological justification dates to the 1311 Council of Vienna, which banned all trade in military material with Muslim states and empowered the crusading Orders to hunt and seize all such 'contraband' goods. In Cutajar's words, this provision was "elastically interpreted" by the Order's corsairs.⁷⁰

Understandably, piracy and privateering were highly unpopular activities among the countries involved in commerce. The tensions in the sixteenth and seventeenth centuries between Venice and the Order of Saint John are understandable in this context. Mallia-Milanes provides a summary of the conflicts and disputes between the Order and their least friendly counterpart in Europe, Venice.⁷¹ Long, drawn out disputes, sometimes involving the Pope, took place throughout seventeenth century.⁷² Venetians maintained "all galleys and corsairs vessels should keep clear of her *Stato da Mar*," and in return, the Order's position was that they were entitled to wage war against the Crescent "in any part of the world."⁷³ The easiest means for the

Venetians to restore the damage caused by the Hospitaller corsairs was to issue a *sequestro* and seize the Order's income from the lands constituting the Grand Priory of Venice.⁷⁴ There are several accounts that give us insight into the amounts of material and funds that were confiscated.⁷⁵ For example, in 1776 the income from the Grand Priory of Venice was 10,207 *scudi*, 10 *tari* and 13 *grani*, more than the cost of a new galley.⁷⁶ Often, this income was completely lost with the issue of one or more *sequestro*, depending on the damage caused by the Hospitaller corsairs in that year. Thus, every *sequestro* meant a considerable financial lost for the Order. Such actions were denounced by the Order as "acts of outright larceny committed against her title to ecclesiastical immunity, with no regard to the rights and privileges extended to her by popes, emperors, kings, and princes."⁷⁷ As for Venice, the *sequestro* acted as security for the reimbursement of any losses suffered by Venetian merchants at the hand of the Order, to prod the Grandmaster into disciplining his corsairs, and to prove to the Porte that the Republic had no hand in such hostile operations.⁷⁸

Both the Hospitallers and corsair ships licensed in Malta were known for their exceptional brutality in extracting information from captives. Especially during the search for Muslim and Jewish goods it was not uncommon that ship owners and crews would be tortured to "confess" about the ownership of the cargo on board. Several such court cases by Venetian merchants are preserved in the Venetian archives.⁷⁹ Little could be done when the ship owner 'confessed', without the intervention of the Pope or the issuance of a *sequestro*, since the courts in Malta were known to be unusually corrupt; the courts could be easily bought since the judges and advisors were personally involved in corsairing.⁸⁰

After several hostile incidents on the part of the Hospitaller corsairs, the Venetians retaliated and relations deteriorated into a state of war in the last two decades of the sixteenth century.⁸¹ Mediterranean and European-wide food shortages in this period led the Maltese corsairs to seize numerous ships around the islands. A ship carrying Puglian grain to Naples was seized near Messina. Another one from Ragusa was forced to Malta instead of its intended destination, Palermo. Grain from other Genoan and Ragusan ships was similarly confiscated.⁸² During the last decade of the sixteenth century the captains of the Maltese privateer ships caught in the Adriatic by the Provveditor of the Venetian armada were hanged and the crews imprisoned.⁸³ At the beginning of the seventeenth century, relations had deteriorated to such an extent that the Venetians began to blame the Hospitaller corsairs for all attacks on their ships in the Eastern Mediterranean.⁸⁴

The loss of the *commanderies* in certain countries such as Britain (1540) and Denmark (1649) were not only hard on the finances of the Order, but having its income sources concentrated in certain countries created additional stress on the political affairs and the Order became increasingly dependent on revenue from its properties in France and Spain. The obvious problem with this situation is that financial reliance often meant military and political dependency, which gave the two major protectorates more control over the internal affairs and activities of the Order.⁸⁵ By the end of the seventeenth century, 45 percent of the Order's revenue was coming from the *commanderies* in France.⁸⁶ Increasing French influence was visible in the composition of the naval forces. Between 1600 and 1674 the three *langues* of France made up the 40 percent of the captains in the Order's *corso* and the majority of the *armateurs*.⁸⁷

Fontenay points out that there is an apparent distinction between the composition of the Order's naval forces (which he refers to as the *corso*) before and after 1675. According to his classification, the first period can be described as the "classical *corso*" (from 1575 to 1675). Before 1675 the majority of the *corso* consisted of French Knights of aristocratic background, and privateering was considered to be an honorable activity.⁸⁸ However, France was heavily involved in Mediterranean trade and, especially after 1569, when the Franco-Ottoman capitulations granted to France all commercial privileges previously granted to the Venetians, the maintenance of that fragile alliance and the good standing of French merchants in eastern harbors were too valuable to risk for the small, additional income through the capture of prizes. Accordingly, after the renewal of France's capitulations by the Ottoman Empire in 1674, Louis XIV prohibited the Order's corsair activities in the Levant altogether.⁸⁹

The nature of the relations between the Order and France can be seen in the reaction of the Grandmaster Cotoner, who promptly recalled all of his corsairs in the Levant in 1679 to demonstrate his accord with Louis XIV.⁹⁰ But during the period of disorder that followed, the Grandmaster Perellos (1697-1720) encouraged corsair activities once again.⁹¹ Perellos' rule saw a sudden and uncontrolled increase in the number of corsairs originating from Malta along with an enormous quantity of complaints regarding the activities of his corsairs.⁹² Other Grandmasters, like Manoel Pinto, were more prudent and took control of the situation by prohibiting corsair activities in the Levant in 1742 to avoid further problems with France and the Pope.⁹³

French merchants were not the only ones concerned with the Order's activities. In April 1651 the Order's galley squadron seized an English ship named *Goodwill* in the Malta Channel, capturing 32 Turkish merchants on board along with their goods. In retaliation, the Bey of Tunis imprisoned the English consul Samuel Boothouse in Tunis and sequestered the property of the

English merchants there as a deposit for the Turks' eventual redemption. The Order's contention that it was lawful to seize Turkish goods carried by Christian vessels was disputed by Admiral William Penn, who was directly involved in the dispute. Since 1650, the merchants of the English Levant Company were paying an additional fifteen percent levy imposed on English customs in return for the protection of merchant shipping guaranteed by the Rump Parliament.⁹⁴ Through Penn's intervention Consul Boothouse was allowed to travel to Sicily, where he obtained a letter from the Archbishop of Palermo, addressed to the Grandmaster of Malta demanding complete restitution of the 32 Turks and their goods.⁹⁵ In the meantime, Penn threatened the Grandmaster to accelerate the process. In a letter written aboard his flagship, *Fairfax*, Penn stated: "if by means of such necessity our merchants should be subject to such deep inconveniences, what Resentment the State of England may thereupon make, I cannot conclude."⁹⁶ Grandmaster Lascaris did not appreciate his intervention and the threatening tone of the letters he received.⁹⁷ In the end, and after lengthy bargaining, this issue was settled in April 1657. England paid a ransom of 40,000 pieces of eight reals of Spain to return the Turks to Tunisia.⁹⁸

On August 17, 1665, the Knights seized commercial merchandise belonging to an English merchant named Roger Fowke, the English Consul at Cyprus. This time, Charles II threatened reprisals unless 4,500 dollars were paid for alleged damages suffered by Fowke. The Order, through its special envoy in London, pointed out that the capture had been considered a good prize by the *Tribunale degli Armamenti*; that Fowke had not availed himself of the legal means afforded by the code to appeal against the capture and to obtain justice, and that in any case, the Order could not interfere between the parties at issue nor be held responsible in the matter.⁹⁹ Charles did not agree with their reasoning and spoke his mind in his reply to Cotoner,

which led to the Grandmaster's appeal to the French King to assist them against the demands of the English. Fortunately, before the events lurched to open conflict the problem was resolved.¹⁰⁰

There were further conflicts between the Order and England. Grandmaster Lascaris' reaction to Penn's accusations was similar to that of Grandmaster Carafa's to Captain Henry Killigrew in 1687. Again, the dispute resulted from the Order's claim to the right to seize 'Turkish' goods and passengers even when carried by English ships.¹⁰¹

It is interesting to note that all three incidents outlined above took place during the period when the Order of Saint John was involved in the War of Crete (1645-1669), caused by the Hospitaller privateering in the Aegean. As discussed in the previous chapter, the fact that the Venetians and the Hospitallers were engaged in this 24 year long struggle contributed to English and Dutch commercial success in the Levant.¹⁰² Thus, it is no surprise that the number of Hospitaller attacks on English ships show a parallel increase to the number of English ships involved in the Mediterranean trade. It should also be noted that because the Hospitaller ships were unable to perform their annual corsairing cruises during the war, they might have been more inclined to attack English ships in Maltese waters.

Based on the surviving evidence, it seems that the English were the only nation to aggressively protest the Order's conduct and its insistence on reserving the right to seize Muslim goods onboard Christian ships. The reason for this seems to be partly due to the fact that the English were not bound by religious alliance to the Catholic Order. In the seventeenth century, the emergence of powerful national navies and economies based on the maintenance of international alliances created an environment of intolerance for the actions of the Order. By the eighteenth century, the ever-decreasing size of the Order's fleet presented a diminishing threat

and the limited number of their prizes served to inhibit any strong reactions to the corsair operations.

An incident in 1748 caused serious problems with France. The Knights took possession of an Ottoman ship, which had been taken over by its rebellious Christian crew. On board the galley was the pasha of Rhodes, who was set free in Malta upon the request of the Louis XV, King of France. Even after the Pasha led the largest slave revolt of Malta, the Grandmaster was not able to punish him as Louis XV would not issue the necessary permission.¹⁰³ The French intervened in the Order's affairs once again in 1760 when a ship named *Corona Ottomana*,¹⁰⁴ was captured by the Christian slaves on board while the Ottomans were on land collecting taxes. This crew brought the ship to Malta, where it was renamed as *San Salvador* and was added to the squadron of the Order. However, shortly afterwards the Order was pressured by France to return the ship to the Ottomans. Ultimately, France paid a ransom of 244,000 *scudi* and the ship was sent back to Constantinople in 1762. It was manned by a Maltese crew who were returned to the island on a French ship after making the delivery.¹⁰⁵

It should also be kept in mind that punished the Order's involvement in privateering was sometimes countered by similar actions of other Christian corsairs. Maltese shipping was occasionally harassed by English, Genoese, Flemish, French, and Spanish ships.¹⁰⁶

Why Did It End?

The ever-increasing number of complaints against the Hospitaller corsairs finally led to the intervention of Roman Curia. It was Pope Clement XII's wish in 1732 that "no corsair vessel should be allowed to fit out at Malta under a foreign flag; nor should any Maltese subject be permitted to share of the spoils of privateering ventures covered under any but the Hospitaller cross."¹⁰⁷ These measures were intended to give the Grandmaster complete control over his corsairs. However, the direct outcome of this intervention was the termination of corsairing in Malta altogether. According to Cavaliero "there was no future for Maltese piracy in the Levant" after 1740,¹⁰⁸ and Earle mentions that "Maltese corsairs virtually disappeared as an institution" around 1750.¹⁰⁹ Mallia-Milanes wrote that measures initially intended to regulate the industry (privateering) restricted its scope and led to its steady, overall decline after the beginning of the third decade of the eighteenth century.¹¹⁰ Similarly, Engel speaks of decreasing numbers of prizes and corsair operations and the increasing number of "escorting" duties.¹¹¹

In addition to the increasing complaints about the Order's corsairs, and the decreasing number of potential prizes, there were additional developments leading to a decrease in the privateering activities. One such development was the technological changes in ship construction. As galleys were largely replaced by sailing warships, the slave markets of Malta lost one of their largest customers. The decreasing demand for slaves, and the lower prices offered for them made the type of corsairing practiced by the Order and the Maltese (which concentrated on the capture of slaves) less profitable and led eventually to its demise.¹¹²

The decrease in the number and quality of the prizes taken by the Order highlights the general decline in Muslim trade and shipping. The trade of Christian nations in the Mediterranean was strong during this time and according to the figures presented by Labat Saint-

Vincent, there is a remarkable increase in the number of French prizes taken by the English ships during the Seven Years' War (1756-1763).¹¹³ Between 1757 and 1758 English privateers captured 120 French ships. Thus, this period was the golden age of Mediterranean privateering due to increased trade and shipping activities. On the other hand, the Order of Saint John, being bound by their vows to attack only Muslims, had fewer ships to attack. According to the terms of the licenses issued to Hospitaller corsairs, even when they could capture a Barbary corsair ship with its Christian prize captured earlier, the Order was supposed to return the 'rescued' cargo to its Christian owners. The limiting nature of these contracts led to a decrease in the corsairs that flew the flag of the Order, which, in turn, reduced the Order's income from the shares of the prizes.

Above all, Enlightenment Europe did not see an institution inspired by religious zeal in the Mediterranean as worthy of long-term financial support. The only remaining threats were the Barbary corsairs, and they were now seen as simple brigands attacking the 'civilized world' rather than 'Christianity'.¹¹⁴ There was no major 'enemy' to fight and the function of the Order was diminished to 'patrolling' rather than 'crusading'.¹¹⁵ An effort was made to create a new identity for the order as the 'safe-keepers of the seas' at the beginning of the eighteenth century by the abbot of Saint Pierre. The proposal was entitled "the Project for the extirpation of the Barbary Corsairs," and suggested that a Mediterranean pact be formed to financially contribute to a fleet operated, maintained, and owned by the Order of Saint John.¹¹⁶ The detailed document calculates that funds spent on the construction and maintenance of the squadron would cost less than the damage caused by the corsair activities.¹¹⁷ Holland, France, England, and Spain would give two ships each, and Sweden, Sardinia, the Holy Roman Empire, Venice, and Tuscany would contribute one ship each to the existing three ships of the Order, bringing the number up to sixteen. With this squadron, the Order would clear the Mediterranean of Muslim corsairs in

four to five years, and in the meantime would train officers for the navies of the participating countries. The prize money was to be shared between the Grandmaster, the treasury of the Order and equipment expenses. The abbot even included that the Porte would receive an assurance letter that the activities of this fleet were strictly limited to fighting the Barbary corsairs, and not Ottoman ships.¹¹⁸

This proposal was never put in action and the activities of the Barbary corsairs continued to increase. Hénin-Liétard mentions in his memoirs, published in 1787, that the Barbary corsairs had three thousand ships, and only an allied fleet made out of ships from France, Spain and England could end the problem of corsairs.¹¹⁹ The major difference between this idea and the earlier proposal is that Hénin-Liétard does not mention the Order's forces as a viable addition to his proposed fleet.¹²⁰ Considering that fighting the Muslim enemy was the justification for the existence of the Order, it is significant that the Hospitallers were not even mentioned in a discussion about the problem of Muslim piracy.¹²¹

In summary, the privateers originating from Malta became a serious problem that infuriated the major naval powers of the seventeenth and eighteenth centuries. In addition, decreasing commercial activity on the part of the Muslims left the Order with an ever-diminishing number of prizes and consequently, financial difficulties.¹²² On the other hand, increasing Christian shipping activity provided prey for ships of the Barbary regencies. The Order's squadron, having shrunk to the size of four galleys and three to four sailing ships was no match for the increasingly bolder and more numerous corsair ships.

No matter how important these problems were, it is not possible to determine how much they contributed to the approaching end of the Order. The end came from an unexpected source: revolutionary France.¹²³ Understandably, the noble members of the Order took sides with

French aristocrats during and after the revolution.¹²⁴ Even though the French Grandmaster Emanuel de Rohan made every effort to preserve the neutral position of the Order in order to survive the turbulent times, the French Knights were confused as to where their loyalties should lie and finally sided with the King of France. The Knights tried to prevent the confiscation of the *commanderies* in France that were included in a list of church property to be ‘nationalized’ shortly after the revolution in 1789. Despite all efforts, the Constituent Assembly finally decided to claim for the government all Hospitaller property in France with the publication of the *loi spoliateur* on September 18, 1792.¹²⁵ The value of these properties was estimated to be about 2,338,404 *livres*.¹²⁶ Revenue fell to approximately one-fourth of what it was before 1792, marking the end of the Order’s economic viability.¹²⁷

By 1795 the galleys were laid up, properties were mortgaged, pensions were cancelled and silver was melted down. According to Mallia-Milanes, the French Revolution not only marked a definitive break between the present and the past for the Hospitallers, but also “confirmed with irrefutable logic the Hospital’s irrelevance to the present.”¹²⁸ The French monarchy had been the principal protector of the Order for about a century, leading to political, financial and social dependence and allegiance upon this country.¹²⁹ The disappearance of support led the Order to seek new alliances, in Russia and the United States of America.¹³⁰ Technological advances and shifts in international relations weakened the naval power and importance of the Order and financial difficulties prevented them from being actively involved in the coalition against France.¹³¹ This weakened status encouraged other European countries to consider ruling Malta after the collapse of the Order. The Kingdom of Two Sicilies, Naples, Austria, England, and Russia were all interested in occupying the archipelago.¹³² Another crucial development of this period was the increasing disagreements between the Order and the Roman Curia regarding the extent and exercise of ecclesiastical jurisdiction in Malta. The

discussions were especially heated after the court of Naples claimed the right to interfere through its *alto dominio* to resolve the issue.¹³³ Grandmaster de Rohan's reaction to the papal pressure and his desire to establish his own absolute sovereignty and authority loosened the ties of both the diocesan church to Malta and the Grandmaster to Rome. According to Mallia-Milanes "the fatal stab to the Hospital" came from Pope Pius VI, whose "fury and resentment had almost realized what the French revolutionaries had so far failed to achieve – the complete and immediate extinction of the Order of Saint John."¹³⁴

In the end, the French politicians who perceived that under the Order's rule the islands were "a monument of feudalism and superstition" realized that it was only a matter of time before Malta was occupied by one of their most dangerous enemies, Russia or England.¹³⁵ The only logical move on their part was to act first and take control while the French Knights were in majority in the Order. The population of the island, it was believed, would support the invaders against the Order, since "they wanted to be with the only nation which could make them enjoy perfect liberty."¹³⁶ Thus, Napoleon's invasion of Malta was the result of a process that started long before his Egypt expedition.

Naval Training During the Rule of the Order of Saint John

Any Catholic man above the age of eighteen, who was born of a legitimate marriage and who could demonstrate at least eight generations of noble ancestry could become a member of the Order of Saint John.¹³⁷ The Knights were also expected to go through an extensive training program called the *caravan* system upon their initiation. This means that any member of the Order, including the Knights, the serving brothers and the chaplains, had to serve for a term of approximately two years at one of the main seats of the Order in Malta. The choices were the military, hospitaller and religious services. The main military service duty for *caravanists* was performed in the navy of the Order. Some *caravanists* stayed in the navy of the Order to develop a professional career as naval officers, so the navy was continuously led by experienced members of the Order and replenished regularly by cadets from all over Europe (see Chapter X for details).¹³⁸

The Order also functioned as a naval school to generate experienced naval personnel for countries represented by the Order's members, specifically France and Naples.¹³⁹ During his service in Malta, a Knight who chose to be part of the naval forces was expected to take part in the patrolling cruises of the galley squadron (and the sailing ships after the eighteenth century).

According to the constitution of the Order certain government functions were reserved for particular *langués*. The minister of the navy, referred to as 'the admiral' in contemporary documents, and his lieutenant admiral were always Italian. All other functions in this navy, including that of the fleet commander and the captains, could be occupied by knights and partially by brothers at arms originating from every nation contributing to the Order.¹⁴⁰ Since the squadron was constantly engaged in active service the novices were able to receive practical instruction at sea both in ship handling and fighting tactics.

Maintaining standing navies is a relatively recent practice in Europe. The general practice was to construct a fleet for a specific battle and recruit the personnel to serve on the ships for this specific occasion. The majority of those who served on the ships were released upon the completion of the mission. Moreover, the absence of hostilities for extended periods of time could lead to the stagnation of experienced naval personnel who would be unprepared for the next round of fighting. For these reasons, the continuous activity of the Order's squadron provided a great opportunity for the European aristocrats to acquire the necessary knowledge and practical experience to lead their own national fleets when necessary.

A listing of the galley commanders in the French Navy dated July 2, 1676 shows that about 70 percent were Knights of Saint John.¹⁴¹ Unfortunately no source precisely cites the total number of members of the Order of Saint John serving in the European navies. However, according to Dauber's study, the only fleets in which the members of the Order served were those of the Holy Roman Empire, Spain (all prior to the arrival of the Order in Malta), the states that composed the langue of Germany (before the majority of them became Protestant) and finally France.

Fra Anne Hilarion de Tourville (seventeenth century), Fra Jean Baptiste de Valbelle (seventeenth century), Fra Paul de Saumur, Fra François Joseph de Grasse-Tilly and his brother, Fra Pierre Andre Suffren de Saint Tropez are some of the famous naval commanders who were trained by the Order of Saint John.¹⁴² The rear-admiral of the Russian fleet Fra Giulio Litta, and the commander of the Austro-Venetian Navy up to 1847, Fra Friedrich von Österreich, were other accomplished members of the Order excelling in the navies of their home countries.¹⁴³

Name lists and other types of information are available through Dauber's¹⁴⁴ and Petiet's¹⁴⁵ detailed works on this subject. It is important to note certain aspects that stand out. First of all, although many countries were represented in the Order, French Knights predominated in its navy. Second, most of the famous officers who were first trained in the Order's navy were French and served in the French Navy after the completion of their service in Malta. Thirdly, the Order of Saint John was increasingly under the influence of France after the seventeenth century. The initiation of nautical schools in Malta (such as the Jesuits' college in Valletta) the introduction of third rate ships to update the Order's fleet technologically, and the beginning of certain training protocols such as target practice, parades and ceremonies, all introduced by the eighteenth century, not surprisingly date to the decline of corsair activities.¹⁴⁶ Developments in maritime technology such as intricate navigation instruments and complicated sailing rigs, requiring skilled workers and officers with highly specialized technical knowledge. This demanded the creation of schools for the instruction of personnel. In 1742 Grand Master Pinto founded a school to teach students reading, writing and advanced mathematics, and another institution to impart the art of navigation. To encourage young Knights, he provided two annual prizes of five and ten *scudi* respectively for students attending both schools.¹⁴⁷ In 1765, De Rohan issued the orders for the organization of classes in advanced mathematics and navigation.¹⁴⁸

It seems likely that the underlying motivation for developing Malta into a neutral naval training center was to serve the French Navy. Indications of such an idea are apparent in a proposal of 1784, in which the prime minister of Naples expressed his wish of transforming the navy of Malta into a strictly Neapolitan naval school. Grandmaster De Rohan sent his ambassador Sagramoso to Naples with an order “to do everything to prevent such things from happening.”¹⁴⁹

Malta continued its transformation into a naval training center at the end of the eighteenth century. The only concern was to preserve the neutral character of the island, and prevent its exclusive use by one European power. The exclusive access of French Knights to the administration and government of the Order enabled them, however, to pursue the establishment of a practical naval school in Malta while maintaining the Order of Saint John’s neutrality and autonomy, while the institution’s ideology provided the excuse for ‘practical training’ provided by attacking Barbary shipping.

Quarantine Shipping

The practice of sequestering merchandise and passengers for a period of time before issuing a free release – *pratica* – was initiated by the Adriatic cities of Venice and Ragusa in the fifteenth century.¹⁵⁰ Ragusa had a permanent quarantine center, a *Lazzaretto*, by 1465 and that of Venice was in service by 1485. The practice spread to other Christian ports in the sixteenth century, but was not performed in Muslim ports and in ports outside the Mediterranean until the nineteenth century.¹⁵¹

The Hospitaller Order of Saint John established its first hospitals in Malta shortly after its arrival to the island in 1530. The building known as the Birgu Infirmary was built in 1532, catering to the Knights and male civilians.¹⁵² This hospital was moved into the newly built construction in Valletta in 1575 and was called the *Sacra Infirmeria*, again serving only male patients.¹⁵³

In both the Birgu Infirmary and the *Sacra Infirmeria*, patients suffering from contagious diseases were segregated in separate wards.¹⁵⁴ The necessity of segregating suspected victims of contagious diseases led to the establishment of the first quarantine quarters in the Grand Harbor, between Senglea and Kordin with a temporary wharf for clearance of merchandise called the *Barriera*.¹⁵⁵ After the construction of Valletta in 1566, a hospital known as the *Barriera* station was also added to the city, replacing the old wharf. In 1584, a committee consisting of two Knights and three Maltese noblemen (known as the health commissioners) was established with the task of inspecting incoming ships.¹⁵⁶

The establishment of Manoel island as a temporary quarantine hospital – or *Lazzaretto* – took place during the plague epidemic of 1593. The little island in the middle of Marsamxett

harbor was an ideal place for the segregation of contaminated cargo, passengers and crews, and its proximity to the Grand Harbor rendered its control feasible. Grandmaster Lascaris erected a permanent *Lazzaretto* on the same site in 1643, which later was enlarged.¹⁵⁷

After the establishment of the *Lazzaretto* the main function of the *Barriera* station was reduced to the inspection of ships with a clean bill of health (*patenta*). Passengers and goods arriving on ships with a clean bill of health were required to remain under observation only for eighteen days.¹⁵⁸ The site selected for that purpose was on the south side of Valletta and consisted of a row of warehouses and rooms for the passengers and crew for their accommodation during the short quarantine period. Those who displayed signs of plague were referred to the *Lazzaretto* in Marsamxett Harbor.¹⁵⁹ Ships that entered the port for shelter or for supplies were also obliged to anchor below Castile Bastion near the *Barriera* station, and remain under the constant watch of two quarantine boats until the end of the bad weather or transfer to the *Lazzaretto*.¹⁶⁰

The main function of the *Lazzaretto* was to segregate incoming passengers as well as imports from areas where the plague was considered endemic, or from ports that were known to be currently infected.¹⁶¹ Within the first category came all the Mediterranean lands under Ottoman rule i.e., most of Dalmatia, Greece and the Aegean islands, Asia Minor, the Levant, Cyprus, Egypt, and North African lands known as the Maghreb, excluding Morocco which eluded Ottoman control. All passengers and goods coming from these lands had to be cleared by the quarantine authorities before being granted release (*Pratica*) to circulate in Malta and other European ports.

The quarantine period varied in duration based on the circumstances and the nature of the cargo. Theoretically, every ship had to go through a quarantine period of 40 days. The

beginning of the period started from the last suspected direct contact with another vessel at sea or the date of departure from the last port of call.¹⁶² During this period the cargo was unloaded to be fumigated and disinfected and the passengers were either accommodated in the same building or stayed on board their ships.¹⁶³ According to John Howard's report, by 1785 the *Lazzaretto* was capable of allowing a proper separation for cargoes from six or seven ships simultaneously.¹⁶⁴

Maltese merchant ships, the Order's privateers, and even the Order's naval fleet were not granted an exception to these regulations.¹⁶⁵ In fact, the *Lazzaretto*'s services benefited mostly the Maltese ships and corsairs until the second half of the eighteenth century.¹⁶⁶ Despite all precautions plague epidemics are known to have affected the Maltese Islands throughout the seventeenth and the eighteenth centuries.¹⁶⁷ Plague outbreaks around the Mediterranean were warning signs and reasons for the quarantine control to be intensified.¹⁶⁸

Some instances, such as the outbreak of plague in Messina in 1743, were exceptionally alarming as most of the food consumed in Malta originated in this region. In this instance the number of galleys patrolling the channel between Malta and Sicily were increased. All coastal guards were doubled and a survey of the coastal towers was ordered by the Grandmaster. The system of coastal watchtowers played an important role in controlling the traffic between Sicily and Malta, and was under the control of the jurats of the Università of Valletta, Vittoriosa, Senglea, and Mdina.¹⁶⁹

The *Lazzaretto* system operated at no cost to the treasury of the Order, its income and expenses being approximately equal. According to figures from archival sources, during the period 1779-1788, the expenditure of the quarantine services was calculated at 12,532 *scudi*, and the income derived from the *Lazzaretto* was 13,117 *scudi*. However, it is important to note that

these figures indicate the low cost of the entire operation. Contemporary figures for naval construction and maintenance indicate that the cost of a galley was 17,250 *scudi* in 1785, while the annual net income of the *Lazzaretto* was about 762 *scudi*.¹⁷⁰

Therefore, it is clear that the quarantine services were not providing a financial contribution to the Order's budget. Nonetheless, the Order invested in these facilities in one of their most economically difficult periods in the second half of the eighteenth century. Grandmaster De Rohan approved extensive repairs to the *Barriera* station and ordered the construction of additional buildings for the *Lazzaretto* in 1783. Similarly, in 1797, after the loss of the *commanderies* in France (1792), the Council authorized the renewal of the quarantine barrier at the *Barriera* Wharf in the Grand Harbor to prevent loiterers from encroaching over the quarantine boundaries.¹⁷¹

It appears that in the last years of their rule in Malta, the Order made an attempt to emphasize Malta's role as a major quarantine port to serve European ships. Considering that the main threat to the Order's existence was revolutionary France and the confiscation of their territories in that country, it seems likely that this attempt to re-define the function of Malta and the Order of Saint John according to the needs and requirements of France was an effort to survive.

According to Saint-Vincent's figures between 1779 and 1783 the majority of the ships undergoing quarantine in the *Barriera* station and *Lazzaretto* had French ports as their destination or origin.¹⁷² In other words, Maltese harbors were increasingly becoming the quarantine stations serving French merchantmen. The fact that the French Knights dominated the Order in this period, and that the Knight in charge of the hospital services (the pillar or Grand Hospitaller) was always a French Knight, supports this hypothesis.¹⁷³ After the invasion of

Malta by Napoleon in 1798, the new occupants must have agreed with Malta functioning as the main quarantine station for Europe, as Napoleon, in one of his earliest decrees, ordered that the health regulations in Malta were to be as rigorous as those of Marseilles.¹⁷⁴

CHAPTER XII

MALTESE POPULATION DURING THE PERIOD OF 1530-1798

The arrival of the Order of Saint John on 26 October 1530 was an important turning point in Maltese history. It was the first time that Malta's rulers were based on the island since the time of the little-known cultures of the Neolithic period. Curiously, the local Maltese population almost entirely disappears from the historical record in this period, during which the emphasis was on the Order of Saint John and its European members who spent only limited time on the island. The fate of the Maltese can be read between the lines, and a general picture can be acquired through the obscure references to the 'locals'. The following paragraphs are a preliminary attempt to shed light on the effects of the Order's rule on Malta and the Maltese.

Chapter IX described the first impression of the Order's inspectors: the Maltese Islands lacked foodstuffs, fortifications, and the people necessary for a defensive force. The Knights were almost forced to accept this 'gift' from Charles V, with the understanding that they were to build the infrastructure they would need, including fortifications, hospitals, palaces, residential areas and religious centers. Fortifications such as Fort Saint Angelo and the landward defenses that surrounded Birgu were erected within a few decades of the arrival of the Order to Malta.

The Order of Saint John was one of the most prosperous religious institutions in Europe, especially in the late sixteenth and seventeenth centuries. Their investment in Malta created an economic vitality on the island and new job opportunities in construction and ancillary businesses that provided the food and luxury items to the Knights who resided on the island. The Maltese population increased fivefold throughout the Order's rule, and new trades and

industries were developed to meet the financial and material requirements of this population.¹ Trade contacts with the North African coast were renewed and safe-conducts were issued to Muslim and Christian merchants. The major expenditures of the Order were the maintenance of the galley squadron, salaries of the office holders, expenses of the quarantine hospital, and the construction and maintenance fees for the fortifications. In addition to the income from European estates, the major sources of income for the Knights were prizes taken by the galleys, entry fees to the Order, and the ransom and sale of slaves. The prizes and slaves were sold in Maltese markets and constituted the major exchange goods of Malta. Corsairs were expected to bring their prizes to Malta unless the condition of the captured ship dictated its sale in another harbor.²

All of this suggests a generally positive impact on the island, but part of the Maltese population, especially the local nobility and the Maltese middle class, deeply resented the Order's rule. Prior to the arrival of the Knights, this population formed a 'micro society' enjoying "little money, little prestige, and little power."³ The grant of the Maltese Islands to the Order in 1530 alarmed the inhabitants and the ruling class in particular. Although rule by the Aragonese crown had not always been positive, the Maltese were distinctly concerned about what the Order's rule might bring. The local governing bodies, the *Universit s*, objected strongly to the transfer of sovereignty, but in the end they had to settle for an assurance from the Order that their traditional rights and powers would be respected.⁴ The Maltese, therefore, found themselves the subjects of a new ruler, the Grandmaster of the Order of Saint John of Jerusalem. According to the initial agreements the Grandmaster was expected to act with the advice of the Council and in accordance with its statutes. But in his dealings with the Maltese people he was not so restricted and the ancient privileges and liberties of the islanders were never to greatly restrain his authority.⁵ The day to day running of the administration remained in the hands of the

Universitàs consisting of two to four *jurats* (*giurati*), or aldermen assisted by several officials. Based on Bezzina's study the *Universitàs* in Gozo during the Knights' period, the major responsibilities of this institution were to organize the food shipments from Sicily, arrange the sanitary and cleaning services in the town centers, and to administer the schools on the island.⁶

Political power was taken away from the Maltese after the establishment of the Order's rule, and their exclusion from the honors of the Order and its political offices, was perceived as an offensive act. Maltese could not become Knights, leaving no room for the Maltese nobility and upper class to advance in this new system imposed by the Order.⁷ The rest of the population was illiterate, ignorant and were dominated by the clergy.⁸ The inquisitor, appointed both to extirpate heresy, witchcraft and other crimes, and to act as Papal Nuncio, was always a foreigner.⁹ Similarly, the bishops of Malta came from a number of different nations including Italy, Spain, Portugal, France, and Germany.¹⁰ In Bonnici's opinion, based on his extensive study of the inquisition documents, "the Maltese resented that their leaders were foreigners who showed little inclination to learn their language."¹¹

During the Order's rule the number and size of manufacturing concerns on the islands expanded. The greatest expansion took place in the industries associated with the two spheres of military operations: the galley squadron and the defensive structures, most of which were around the Grand Harbor area.

Changing Landscapes and Job Opportunities: Maltese As Construction Workers

The major negative effect of the Order's presence in Malta was the fact that the Maltese Islands became a more frequent target of hostile action due to the Order's active participation in campaigns against the Muslims and its use of Malta as a corsair base.¹² One of the most urgent

tasks to be undertaken by the Order upon its arrival in Malta was to reinforce the fortifications, but apart from creating jobs fortifications around the Grand Harbor contributed very little to the protection of the Maltese population.¹³ The attackers always choose to assault the least defended areas and the unprotected Maltese people of the countryside.¹⁴

The inadequacy of the defenses became apparent after the Ottoman siege of 1565.¹⁵ In the years following the siege, there was a boost in construction activities, without a doubt, the most important addition being the construction of Valletta instigated by the events of 1565. Generally speaking, large scale construction activity tended to be sporadic and undertaken only in response to impending attack, for example, in 1566, 1635, 1645, 1670, 1715, and 1761. During these years, speed was usually all-important and large numbers of workers were needed. Most of the labor force was recruited from the local population, but shortage of workers was often cited as an impediment to progress.¹⁶

Progressive urbanization of Malta and the concomitant rapid growth of the urban population were also accompanied by a general increase in overall population.¹⁷ The population of Valletta doubled between 1576 and 1632.¹⁸ The total population of Malta in 1590 was 32,290.¹⁹ Additionally, there were 3,426 members of the Order in residence in Malta. The number of the Order's residents in Malta remained constant at around 3,500, slightly increasing to 3,648, while the islands' population increased to 51,750 by 1632. In other words, while the number of the members of the Order increased by six percent, the population of the Maltese Islands increased by about 40 percent. According to Cassar's figures, the population of the islands was about 114,000 in 1798.²⁰

Expanding Horizons: Maltese as Boat and Shipbuilders, Seaman, Corsairs and Merchants

When the Order came to Malta, there were simple facilities for repairing vessels in the Grand Harbor but not a full-fledged shipyard. Larger scale repair facilities were constructed by about 1540 in Birgu. In the early years the yard was used only for repair work but after the enlargements in 1600 and 1636 the activities there created more job opportunities for the local population.

Even more job opportunities were available on board the galleys and sailing ships of the Order. The highest rank a Maltese man could reach in the Order's navy was that of assistant navigator, or health assistant (i.e., doctor, surgeon). Pre-eighteenth century records of ships' crews are unavailable but there is no doubt that there were Maltese men serving as soldiers on board warships based on the payments some Maltese families received for soldiers killed in action.²¹ But in general, Maltese serving on the galleys were part of the *buonavoglia*.²² There were about 200 to 250 of this type of rowers on each galley in addition to the *forzati*.²³ Being sentenced to row on the galleys was better than a prison term, as prisoners had to pay for their own food at fixed prison prices, while rowers were provided with at least one meal a day.²⁴

Volunteering to serve on board the Order's galleys also meant access to a potential income as the galley crews were allowed to sell limited amounts of commercial goods in the ports they visited. According to archival accounts the most lucrative business was the sale of tobacco, or to sell the allowance to the captain of the galley.²⁵

Auxiliary vessels that transported munitions, provisions, and equipment for land operations supported the warships of the Order. Such vessels often belonged to Maltese masters and were hired for specific cruises.²⁶ At other times, such merchant vessels transported

foodstuffs from Sicily and other parts of the Mediterranean.²⁷ The Maltese *tartana* was the most common transport ship, followed by smaller boats called the *pinco*, the *pollacca*, the lateen rigged brigantine, and the *fregata*. The Maltese *xprunara* was the popular passenger boat that plied between Malta, Sicily and Naples especially in the eighteenth century.²⁸

Corsairing was one of the most important incomes both for the Maltese population and for the island's economy. According to Cavaliero's estimates, between 1650 and 1750 about half of the able-bodied male population of Malta was at sea –presumably as corsairs– during the sailing season.²⁹ Unfortunately there is no detailed information about this aspect of livelihood clearly very common among the Maltese.

The major native industry was the export-oriented cotton trade but the limited cotton production, and limited business opportunities on the island led Maltese merchants to invest in foreign trade and maritime commerce.³⁰ In addition, because of the Order's attacks on Muslim merchant ships, Maltese ships were often the target of similar attacks from their Barbary counterparts. For this reason Maltese merchant ships often required escorts even for the short passage from Sicily to Malta.³¹ With the decline of the corsair sector and stagnation in the Order's income during the course of the eighteenth century, an increasing number of Maltese began to invest in merchant vessels that followed the coasts of western Italy, southern France, and eastern Spain all the way to Cadiz, and sometimes Lisbon.³² These voyages were two year long tramping cruises with a constantly changing cargo.³³ Vassallo surmised that the brigantine trade, which involved the exchange of goods purchased in Mediterranean ports outside Malta, created an extensive network of retail outlets on the Spanish mainland and provided commercial opportunities for the sailors in the harbor towns of Malta and Gozo, whose livelihood traditionally depended on corsairing and the Order's navy. In the eighteenth century, brigantine trade and the 'cotton trade' that involved the shipping of Maltese cotton yarn to Barcelona

provided both an investment opportunity for “the idle cash generated by centuries of corsairing” and an outlet for the Maltese population to adjust their livelihood to the changing political and economic conditions by switching from a war-based economy to one based increasingly on peaceful pursuits.³⁴

Hundreds of other Maltese worked in related business sectors such as the warehousing, and in the service industry as bakers, tavern workers, shoemakers, barbers, tailors, carpenters, and blacksmiths. Other common professions included fishing and the jobs related to the thriving slave market.³⁵

European Perceptions

The only descriptive accounts regarding the living conditions and physical characteristics of the Maltese population comes from European travelers. Although they may be unreliable in some cases, they provide interesting information about how the Maltese people were viewed by their ‘rulers,’ which, in turn, explains some of their reactions to this ‘rule.’

Jean Quintin, secretary to Grandmaster L’Isle Adam, in his *Insulae Melitae Descriptio*, dated 1536, described Maltese peasants as inhabitants of caves or African huts.³⁶ He noted that “the women are not at all ugly but live very much as if they were uncivilized; they do not mix with other people; they go out covered in a veil, as to see a woman is here the same as to violate her.”³⁷ Based on other traveler accounts, it seems that Maltese women continued to wear a veil until the end of the eighteenth century.³⁸

The Venetian Gianbattista Leoni, visiting Malta some fifty years after the arrival of the Order, portrayed all the local inhabitants as *gente povera, e rustica assai*.³⁹ According to Leoni the construction of Valletta had provided the people with jobs, but once the city was completed

they had to return to their traditional misery. He reckoned that there were hardly ten families on the island with an annual income of 600 *scudi* and some 50 families with 200 *scudi*. People within this income bracket managed to live “with some civility” but the rest spent miserable lives, partly due to sterility of the land, and partly due to “their own innate lethargy and indolence.”⁴⁰ This picture of ‘the misery and incredible poverty of the people’ was again confirmed by a mid-seventeenth century account, which claimed that without the Order’s finances and expenditure the island’s revenues would not have been able to sustain one-fourth of its current population.⁴¹

According to a seventeenth-century account the Maltese men were strong, rather dark, and well used to hard work. They were unschooled and their manners were rough. Most of them did not speak any language other than Maltese and, if they did, it was almost always Italian.⁴² In the sources compiled by Mallia-Milanes, Maltese are described as versatile, sagacious and pious. Physically, they were tanned and sturdy. They could endure hardship and live without the least delicacy and thrive on a diet of blended bread, herbs, vegetables, and brackish water.⁴³ A letter written in 1624 by Inquisitor Onorato Visconti to Cardinal Bandini mentions that Malta swarmed with beggars and the Hospitallers did little to ameliorate the situation. Visconti mentioned that the *per capita* income was about 36 *scudi* a year.⁴⁴ According to contemporary prices, such income could only have been enough to buy one loaf of bread per day, not counting the expenses for clothing and shelter.⁴⁵

Another European traveler, Peter Tolstoy, provides a quite different picture in his account of 1698. At the time, he says, the Maltese homes were built of stone and were “fine.” Food was abundant, and was not expensive. Streets were never dirty.⁴⁶ In the eighteenth century this image changes further. Giacomo Capello, a Venetian reporting to the Doge in 1716,

mentioned that several families were well off, their income being derived from renting houses, privateering, and the slave trade.⁴⁷

Conclusion

Maltese society under the Order's rule was similar to European society under the *ancien régime*. It was likely not the intention of the ruling class to treat the native population badly or harshly. Nonetheless, by the eighteenth century, life in Hospitaller Malta was marked by a huge social and economic gap between the young and pervasive Knights who spent their fortunes on luxuries and entertainment, and a very poor and uneducated Maltese population who served the upper class.

The Knights almost always considered themselves 'exiled' in Malta, and felt the need to spend part of the year away from the island.⁴⁸ The Maltese, on the other hand, resented their inability to play a role in the political processes that affected their own lives.

A political maneuver by the French aimed to take advantage of this subtle discontent. A decree of 1765 by Louis XV mentioned that "the inhabitants of the islands under the Order of Malta are to be considered citizens of the Kingdom of France, so that they can settle here, buy and sell property, both *inter vivos* and by testament." This is one of the earliest documents to mention 'the Maltese nationals' without reference to the Order of Saint John. Certain limitations outlined in the text maintain that even though the Maltese are allowed French nationality, they still could not become members of the Order of Saint John. This limitation meant that the Maltese people could benefit from being French citizens by trading and conducting business in France, where the possibility of social mobility allowed them to rise in status. This situation moved the Maltese people closer to French influences, including the revolution that was to

follow shortly. In fact, in Earle's words "Malta became for Marseilles what Leghorn was for the English and Zante for the Venetians" – an intermediary port for Levantine trade.⁴⁹ In an eighteenth-century historian's view "Malta, by 1789, was, in reality, a dependency, a colony in fact, of France."⁵⁰ These late-eighteenth-century developments explain the Maltese population's close bonds with, and interest in, a "regenerated France," and their concurrence in the eviction of the Order in 1798.⁵¹

CHAPTER XIII

CONCLUSIONS AND AFTERWORD

The maritime history of Malta is essentially the history of major foreign powers competing for military and commercial supremacy in the Mediterranean. The competition in and around Malta waned from the sixteenth century onward, but the archipelago played virtually no role in either the growth or the resolution of these conflicts. The inflated importance of the islands in modern history is largely an outgrowth of the exaggerated importance attributed to the Order of Saint John on the world stage. Predictably, the majority of the historians studying the maritime past of the Maltese Islands are either Maltese or they are modern-day Knights of Saint John, and all of them are convinced of Malta's historical importance. Thus, the tradition of overstating the role played by the Order and its navy in world events is based on the supposition that Malta was strategically important throughout history, much as it had been under British rule (see section titled 'afterword'). This erroneous supposition was supported by concomitantly exaggerating the importance of Malta throughout history: in many ways it is an attempt to write the Maltese into a history that largely ignores them. The indigenous Maltese people themselves are largely absent from the historical record and are not recognizable as a cohesive group having a national identity until the middle of the British rule in the late nineteenth and early twentieth centuries.

The opinions of modern historians that identify Malta as 'strategically located' generally do so after the end of the prehistoric era. Prior to the arrival of the Phoenicians in Malta, it is difficult to address the possible 'strategic importance' of the archipelago considering the limited nature of seafaring and paucity of archaeological evidence. From the Phoenician period onward

the strategic importance of the island paralleled developments elsewhere in the Mediterranean, placing Malta in varying proximity to major maritime trade routes. The archipelago experienced periods when it held little strategic importance (for example, when Mediterranean trade was interrupted) or when trade routes generally bypassed the islands, particularly in the Punic and Roman periods. During these eras, the archipelago was only loosely connected to the rest of the Mediterranean world, and subjected to little cultural influence via infrequent visits by ships that brought the provisions, exotic items and those blown off course or lost in storms.

The most striking feature of the Prehistoric, Phoenician and Punic periods in the Maltese Archipelago is that the existing cultures appear to have been repeatedly and completely assimilated by successive waves of immigrants. The relatively low population density of the islands, and the fact that there were few secure refuges may explain the clear-cut differences between the ancient occupation levels and those that came later; the inhabitants could be easily influenced or eliminated by the new arrivals.

In the Roman period, Malta had no strategic importance and was only very loosely connected to the Roman system and civilization. The inclusion of Malta in the empire was of no real importance, and it came under Roman dominion without resistance. Thus, during this period, Malta was not subjected to systematic 'Romanization' and was left to develop at a very slow pace, adopting only a few characteristic Roman cultural, architectural and artistic features over many centuries. The only 'typically Roman' remains of Malta are villas with mosaic decorations, but there are no indications that administrative buildings or architectural complexes so central to the Roman way of life were ever adopted in Malta. For this reason the assimilation of the indigenous culture did not occur during the Roman period of Malta and Punic culture continued to dominate the island.

Until the introduction of cotton in the medieval period, a recurring enigma in the study of Maltese history is the nearly complete absence of any commercial export product that the archipelago might have offered in exchange for the foreign goods that appear in archaeological contexts. The Phoenician and Roman periods are characterized by references to the 'textile industry'. But the quantity of such production cannot have been large considering the low population density and the fact that the climate and available fresh water sources would not have supported the production of the raw materials necessary for a textile industry.

Another pattern that would re-occur throughout the history of the islands was initiated in the Roman period: when connections with a central political authority became tenuous, the archipelago was transformed into a pirate and corsair base. Literary and archaeological evidence suggest that Malta's wealth increased in direct proportion to the increase of locally based piratical activity. The primary reason for this phenomenon is that Malta was unable to become a commercial center because it lacked the resources to sustain an export economy or trade goods. Similarly, the island never became a major center providing maintenance and warehouse services for the commercial vessels because of its considerable distance from the major commercial routes, and the absence of shipbuilding material that required the import of raw material necessary for repairs. This in turn made such activities prohibitively expensive and economically unviable for potential customers. However, Malta was close enough to major trade routes to be a suitable base from which to launch attacks on merchant shipping. Increased wealth from piracy led to an increase in population, which in turn caused food shortages, as the island could not sustain its own population. From the Roman period onward, Malta became dependent on food imports from Sicily, which created an increasing political dependency.

The Byzantine period was similar to the Roman period; the islands were even more tenuously connected to a distant central authority and so preserved previous cultural

‘institutions’. They became impoverished so long as piracy was kept in check by the Byzantine navy and except for the accidental arrival of historic figures lost in a storm, there are no literary references to Malta in this period. Overall it is clear that the turbulent events caused by the collapse of the Roman Empire and the rise of a variety of competing states to fill the political void were hardly, if at all, felt in Malta.

The Muslim period of Malta was not very different from the Byzantine one. The culture of the island remains basically unchanged, although the spoken language, possibly a Semitic tongue in use since the Phoenician era, was quickly replaced by Arabic. The Muslim occupants did not utilize the island as a strategic base from which to launch attacks since Sicily was already in Muslim hands by the time Malta became part of the Aghlabid state. In this period, Muslim settlers seem to have arrived as peaceful occupants, mainly involved in farming and agriculture, introducing new techniques and crops. Malta was either unknown to Muslim geographers or seen as a place of little or no importance based on the wildly varying location or omission of the archipelago in contemporary charts. It likely continued to be provisioned from Sicily, and may have offered a new crop, cotton, in exchange.

Subsequent control by the Norman and Aragonese Kings of Sicily did not bring new settlers to Malta, and their influence on the local culture seems to have been limited to a progressive and slow change in customs related to worship. The most important events of the period, such as the crusades, bypassed Malta, causing it to remain relatively isolated from the rest of the Mediterranean. The rise of piracy in the Mediterranean and increasing visits by Genoese pirates strengthened the connections of Malta with southern Europe, but there is no indication that the native population of the island played a significant role in such activities. Piracy did not become an organized way of life, or a primary economic activity in Malta during this period. When the Genoese lost interest in Malta as a pirate base, both piracy and Genoese

connections disappeared. The rule of the Genoese counts was similar to that of the Order of Saint John in the way they utilized the islands: both arrived in Malta as cohesive and well-organized political and military entities with a long history and mission. The difference is that Malta was the only sovereign territory for the Order of Saint John, whereas for the Genoese counts it was a temporary base utilized for the specific purpose of launching attacks on merchant ships.

It can be said that, until the arrival of the Order of Saint John, Malta was tenuously connected to the rest of the Mediterranean world, including Sicily, Italy and North Africa, by a limited maritime commerce that was at times sporadic. One outcome of this situation was that monumental events that swept across Europe and the Mediterranean world like a tidal wave and determined the course of the western history and that transformed Mediterranean civilizations, economies and culture were only felt as a ripple in Malta. The collapse of the Roman Empire, abatement of east-west communications and commerce fueled by the advent of the Crusades, the Italian renaissance and the reformation of Christianity in wake of the Protestant revolt in Germany only reached Malta as news at much later dates, the consequences of which were hardly observed in the archipelago at the time they occurred.

When they arrived in Malta in 1530, the Knights of Saint John had already possessed a naval branch since the fourteenth century. They also had their own history, traditions, customs, and a complex economic system with income sources outside Malta. We do not know the extent to which they interacted with or dominated the cultural life of the islands, since the Maltese inhabitants more or less disappeared from history when the islands became the Order's property. From 1530 onward, historical accounts and references to Malta increase considerably as the Order of Saint John necessarily advertised its activities to justify its function, and promote its

accomplishments to the European powers that provided much-needed political and financial support.

Another way in which the Order's rule in Malta paralleled that of the Genoese Counts was that these aggressive occupants created hostilities by attacking commercial shipping and attracting retaliation from their victims, including Christians. In both cases the victims of the corsairs originating from Malta were unguarded merchant ships, and not the naval forces of their stated opponent. The retaliatory attacks targeted the unguarded countryside of Malta, causing considerable harm to the unprotected rural population and not to the better-defended and fortified harbor areas. The Order of Saint John, however, did more to protect the islands and their populations, mainly because the size, the military power and the damage caused by their enemies was far greater in the sixteenth and seventeenth centuries when compared to the thirteenth century, and required serious defensive measures. The first set of defensive measures was the erection of fortifications in the Grand Harbor area, creating jobs for the Maltese population, and possibly transforming the demographic patterns of the island. But the most important defense of the Order was its naval forces that would ideally eliminate the enemy before they reached the island. This type of activity also provided employment for Maltese men, who, being disqualified from becoming Knights, could not be in command positions, but could be employed as lesser officers or rowers. In addition to the emergence of additional sources of income, the emergence of piracy led to a considerable increase in population and, thus, increased dependence on imported food. The Order's economic organization, with dependence on outside sources of food and shipbuilding materials, was well suited to the preexisting import-oriented subsistence pattern of Malta.

For the period of 1530-1798 it is not possible to speak of isolation. But the Order of Saint John itself was in truth an 'ancient' and increasingly isolated political entity, perceived as

an anachronism by the European countries of the Renaissance and Age of Enlightenment. It is interesting to note that the major intellectual, artistic and ideological developments of this period did not reach Malta at all. The random visitor ending up in Malta due to the storm tossed Ionian Sea rarely occurred in this period, or at least it was not noted in records. Due to the developments in navigation techniques and mapmaking everyone knew where exactly Malta was and, for the most part, they tried to avoid it. The Order's main activity was to pursue a 'guerre de course' against their enemy: Muslims and their trading partners such as the maritime republics of Italy, the foremost example being Venice. The general reaction to the Knights' corsairing activities was in the form of complaints by fellow Christian countries. On the other hand the Muslims – the Barbary regencies and the Ottoman Empire – did not take direct retaliatory action against Malta, but punished the resident Christian merchants in their territories for the actions of the Knights, completely disregarding the absence of any connection between the two except for their common religion. The attack of the Ottoman empire on Malta in 1565 was motivated by a desire to acquire a base closer to the shores of Europe, through which to launch attacks, and not a punitive action directly against the Order.

Throughout their tenure in Malta, the Order of Saint John maintained that its mission was to protect the Christian countries of Europe against Muslim expansion. The main weapon of the Order to fulfill this function was a small navy dedicated to attacking Muslim merchant shipping and to take part in larger Christian coalition fleets when warranted. The squadron that the Order maintained for these purposes was surprisingly small, consisting of five galleys for most of the first century of its existence in Malta. In the last three quarters of the seventeenth century this number increased to six, and for the majority of the eighteenth century, there were four galleys in total.

The maintenance of the Order's force required the establishment of strong connections with Europe to acquire shipbuilding material, ships, and new developments in shipbuilding technologies. The knights were not shipbuilders, and they employed shipwrights from Europe, who, in turn, trained Maltese builders. Nonetheless, the majority of the Order's ships were built outside Malta. The small scale of shipbuilding activities in the Maltese arsenal can be better shown if we compare this number with construction activities at other European arsenals. For example, between the mid seventeenth and the mid eighteenth centuries the arsenal in Malta produced nine galleys, corresponding to only six percent of the galleys built in French yards during the same time. Eighty-five percent of the Order's galleys were built outside Malta. A total of thirty galleys were built in Malta during the Order's rule, and it is likely that some of these were purchased in a pre-fabricated form from the Venetian arsenal. Yet, by the end of the sixteenth century, about sixty-four percent of the total budget was spent on the navy, including costs such as the maintenance of existing vessels and officer's salaries.

The requirements of keeping up with the advancing technologies compelled the Order to develop a squadron of sailing warships in the eighteenth century. A squadron of four sailing ships was added to the shrinking galley squadron. Twenty sailing warships were constructed during the eighteenth century, the majority being built in European arsenals. The justification for the construction of the sailing warship squadron was the need to match the forces of the enemy, the Barbary Regencies, who adopted sailing technology shortly before the Knights. But a closer look at the history of the Order of Saint John shows that Malta was increasingly being transformed into an international Christian naval school in this period, providing theoretical and practical training to the aspiring Knights who wished to pursue a career in the navies of their respective home countries. Increasing French influence in the Order during this period also

explains the interest of France in developing Malta as a base that would support naval and commercial dominance in the Mediterranean.

Transforming their squadron and base in Malta into a naval training school was but one of the additional missions assumed by the Order of Saint John in the late eighteenth century as its increasingly weakened Muslim foe ceased to be a major threat to Europe. Another new function that the Grandmasters of the late eighteenth century advertised was the services provided by the quarantine center of Malta as the gatekeeper and gateway to Europe, keeping the danger of plague under control.

Despite these efforts, the end of the sovereign state of the Order of Saint John arrived before the transformation could be completed. With the confiscation of their estates in France, the Knights found themselves unable to support their members, the population of Malta, and meet their expenses. Closer relations with France hastened the influence of the French revolution in reaching the Maltese population, who, in turn, did not resist the Order's expulsion from Malta by Napoleon in 1798.

As mentioned at the beginning of this dissertation, the major objective in studying Maltese maritime history was to answer certain questions raised during the archaeological underwater surveys conducted around the archipelago between 1999 and 2001. The major outcome of the survey was a realization of the scarcity of underwater archaeological material around these islands. It is possible that the shipwrecks are covered with silt, sand or poseidonia grass. Underwater archaeological sites could have been cleared out by treasure hunters, amateur divers or salvage companies. It is also likely that some shipwrecks lie in deep water beyond safe diving limits and were inaccessible with the equipment available for this archaeological survey. These reasons may account for the general lack of shipwrecks, but we must also consider the

strong possibility that throughout history there was much less seafaring activity around the archipelago than modern historians have presumed.

Historical research was undertaken to make a decision regarding the continuation of the survey project and the selection the future survey areas. After one year of extensive historical research and studying the results of the survey project, I feel that I reached the point where I was able to develop an objective view about the maritime history of Malta.

In summary, I believe that the naval and commercial role of the Maltese Islands has been exaggerated in the historical record, and that the islands played a much less important role in Mediterranean communications throughout their history. The paucity of underwater archaeological material around the archipelago is in complete agreement with the results of my historical study and clearly demonstrates that the maritime activity was much more limited than we all thought.

The maritime entities based in Malta always carried out their activities elsewhere in the Mediterranean. Corsairs attacked ships in the areas with extensive trade and even when they caused harm to their foes, or lost their own ships, the event happened far from Malta. Thus, there is not a single reference to the occurrence of a shipwreck in Maltese waters in the historical record. Based on these results, I have decided to postpone the continuation of the survey project until cheaper, faster, and more efficient technologies to survey deeper water and silted areas become available.

Afterword

The following is a brief outline of Maltese history in the nineteenth and twentieth centuries. The last two hundred years of Maltese maritime history are not included in the study of the topic since, the fall of the Order of the Knights of Saint John provided a logical point at which to conclude for several reasons. It was immediately following the fall of the Order that the archipelago first came under the absolute control of an external, fully developed, nation state. France ruled Malta for only a brief period until the British assumed power in 1800 for all of the nineteenth and most of the twentieth century. It was during this time that Malta entered the modern age, ushered in by the British. Unlike the preceding millennia, during this period Malta actually attained significant strategic and commercial importance as the only central Mediterranean outpost of the British Empire and Navy. This is also the first time that the Maltese themselves figure largely in the history of the islands and assume a national character. Perhaps this character existed for centuries leading up to the British occupation, but the history of the island's indigenous peoples is largely unwritten until the nineteenth century. It was under British rule that the institutions necessary for self-government developed and were nurtured, culminating in the independence of Malta in 1974.

The events of the period following the collapse of the Order of the Knights of Saint John in Malta did not bring freedom to the Maltese people. The French instituted a series of reforms according to their revolutionary principles, abolishing slavery and the nobility and establishing a newspaper. But the French troops also took possession of the Knights' belongings and properties in Malta and introduced new taxes, creating an extra burden for the Maltese population. The defeat of Napoleon at Aboukir Bay, coupled with increased looting practiced by the occupying French troops that extended to the churches of Malta, fomented a rebellion in

collusion with the British military. After a drawn-out siege that lasted for nearly two years, the French were defeated and the British flag was raised in Valletta on September 5, 1800.

The first British Governor of Malta arrived in 1813. English rule was characterized by a harsh administration from the outset, but ultimately without changing the major aspects of daily life. The Maltese were still excluded from the decision-making mechanisms of government while the British garrison increased in number. The establishment of the first British admiralty dry dock in 1848 and the subsequent growth of the Grand Harbor as a major base for the Royal Navy were the most important events of the nineteenth century. However, the most significant development to increase the military and strategic importance of Malta for the British Government was the opening of the Suez Canal in 1869, placing the archipelago on the route to India. After this date, Malta became the headquarters of the British Mediterranean fleet and the islands were largely developed by the occupants with the addition of new defensive works, towers, military hospitals, and improvements to the harbors and dockyard. The Maltese population found employment once again in the service sector in the establishments created by the British to support their naval presence. The population of the island increased to 200,000, causing the migration and dispersion of Malta's excess population to other Mediterranean countries. Those who remained in Malta were finally represented in the administration of the islands in 1835, albeit indirectly, with the establishment of the "seven man council" that had three assigned Maltese members. The council's function was to advise the governor, who was by no means obliged to heed its advice.

A second dry dock was built in French Creek in 1871. The Royal Navy expanded the Order's old shipyard and further developed their facilities in Dockyard Creek, providing most of the employment opportunities for the growing population of the archipelago. Complete dependency on the British presence made it difficult for the indigenous population to demand

more local representation in the government. However, in 1887 the Maltese were granted the right to be represented in a council of twenty, that had the majority of its members 'elected' as opposed to 'assigned'. Yet, even this council was only allowed to make minor decisions about local issues, and the full power of government was reserved for the Crown and to its representative in Malta, the governor.

Disagreements regarding whether English or Italian was to be the foreign language taught in Maltese schools brought an end to the council when they refused to vote on the education budget in 1903. As a consequence, the council was disbanded and a new council with assigned members took over, eliminating any system of self-representation until 1921.

Since the continued employment of the ever-increasing population depended on the expansion of harbor services, periods during which the British re-directed expenditures to the home fleet were exceptionally hard for the population of Malta, particularly in the era before World War I. The years after the war were marked by riots that broke out as a consequence of augmented unemployment and political unrest that targeted the British for the lack of jobs and resources. On June 7, 1919 four Maltese were killed when British troops opened fire on a rebellious crowd; the popular reaction to this event brought about the establishment of a new constitution that granted to the Maltese self-government in matters of local concern. However, growing disputes between the pro-English and pro-Italian council members caused the suspension of the constitution and disbanding of the council in 1930. Malta did not regain self-government until 1947.

Italian aircraft bombed the Maltese Islands on June 11, 1940, the day Italy entered World War II. Malta's role during the early years of World War II was extremely important. The islands were extensively bombed between December 1941 and May 1942 and suffered great

losses in materiel and personnel; in fact, most of Malta was completely leveled. At the same time British aircraft based on Malta were able to disrupt the supply lines between Italy and the Axis forces in North Africa, leading, in part, to the victory of the allied forces in the Mediterranean, and ultimate victory in World War II. The defeat of the Axis forces in Africa and Sicily in 1943 marked the end of major hostilities in the Central Mediterranean region. Emerging unemployment and housing problems after the end of World War II led many Maltese to migrate to Australia and North America.

The constitution of 1921 was re-established in 1947 and a council of twenty was elected locally. Once again, the administration of this council was limited to internal matters, while the British Crown and Governor reserved the right to decide 'the matters of imperial concern'. After years of political struggle that caused the governor to disband the council on many occasions, differences were settled and on September 21, 1964 Malta became an independent state within the British Commonwealth. A Governor General in the archipelago represented the Queen and an agreement between the newly independent Maltese government and the British Crown was reached to keep British troops in Malta as part of a "mutual defense agreement."

The latter half of the twentieth century was characterized by the progressive diversification of the Maltese economy, leading to its decreased dependence on British military bases for employment. This was realized to a large extent with British and NATO support. Finally, in 1974, Malta became a republic with a Maltese president as Head of the State and, in 1979, the military base agreement with Britain was terminated. In 1981 Malta deposited a Declaration of Neutrality with the United Nations, signaling the emergence of a truly independent state governed by its own populace. Independence, for Malta, was a long time in coming.

NOTES

Notes to Chapter I

¹ The project that is described in detail in Chapter II, was a joint project of The Institute of Nautical Archaeology (INA) and The Museums Department, National Museum of Archaeology in Valletta (NMA).

² The absence of archaeological material in these harbors and others may be the result of regular dredging since the seventeenth century. But the dredge never comes close to the banks. In Malta, cultural material in these sections is unusually scarce.

³ The Quarantine Hospital, in front of which we were excavating, was in use in the seventeenth and eighteenth centuries. See Chapter II for detailed information about the excavation.

⁴ See Appendix A.

⁵ The shipwreck sites in Parker's book are all based on a map made by a diver in the 1960s. I personally dived in all these locations and there are no shipwrecks in any of them except for Meliehha Bay, and the shallow scatter at the Xlendi Bay: Anthony J. Parker, *Ancient Shipwrecks of the Mediterranean & the Roman Provinces*, BAR International Series 580 (Oxford, 1992).

⁶ On the other hand, there were corsair ships owned, commanded, and manned by the Maltese during the same period (see Chapter XI, section titled Corsair Operations).

⁷ See Chapter XI, the first section titled Naval Expeditions.

⁸ This issue will be discussed in detail in Chapter VII. For the history mentioned here see Commendatore Fra. Gian. Francesco Abela, *Della descrizione di Malta isola nel mare Siciliano con le sue antichità, ed altre notizie* (1647; repr. Malta, 1984).

Notes to Chapter II

¹ Glenn E. Markoe, *Phoenicians* (Los Angeles, 2000), p. 179.

² Michael Robert House, Kingsley Charles Dunham and Jay Backus Wigglesworth, "Geology and Structure," in *Malta, Background for Development*, ed. Howard Bowen-Jones, John C. Dewney and William B. Fisher, Department of Geography Research Papers Series 5 (Durham, 1962), pp. 25-33.

³ Mario Buhagiar, *Late Roman and Byzantine Catacombs and Related Burial Places in the Maltese Islands*, BAR International Series 302 (1986), pp. 1-2.

⁴ Modern Malta relies on fresh water purified from seawater by reverse osmosis. For more geological information see Neville Ransley, Anton Azzopardi, *A Geography of the Maltese Islands* (Malta, 1988); George A. Said-Zammit, *Population, Land Use, and Settlement on Punic Malta*, BAR International Series 682 (Oxford, 1997).

⁵ Precipitation occurs mostly in the winter months, especially between November and February, with a mean annual rainfall of approximately 450 mm.

⁶ A nineteenth century traveler mentions corn, melons, cumin, sesame, barley, peas, beans, other leguminous plants, clover, carobs, strawberries, figs, pomegranates, grapes, apples, pears, peaches, nectarines, apricots, plums, and different types of lemons and oranges: George Percy Badger, *Description of Malta and Gozo* (Malta, 1838), pp. 52-57.

⁷ The information about the activities of a salvage company that carried out such work around the Maltese Islands was communicated to me during my dissertation defense by Dr. Filipe Castro on December 1, 2003.

⁸ *Mortaria* is a type of spouted bowl, or mortar for grinding and preparing food for kitchen use, with a distinct overhanging rim. This type was produced in Italy from at least the third century B.C. and exported to sites around the Mediterranean, France and England. For more information about the type see John W. Hayes, *Handbook of Mediterranean Roman Pottery* (London, 1997), pp. 80-82.

⁹ Honor Frost, *The Mortar Wreck in Meliehha Bay* (London, 1969).

¹⁰ Information regarding the survey results by DRASSM presented here is based on the report submitted to the National Museum of Archaeology by this team at the end of the survey season, preserved in the Museum Archives. In addition, the author was allowed access to examine the artifacts preserved in the museum storages.

¹¹ The National Museum of Archaeology in Malta distributes printed forms to diving clubs, dive shops, and diving schools around the islands. These forms are kept in an easily accessible place in these places and are used frequently by those who would like to report archaeological material to the museum. We thank the museum for allowing us to access these forms that are among the confidential files in the museum archives.

¹² This information was provided by our team members representing the National Museum of Archaeology, Michael Spitteri and Edmond Cardona.

¹³ These amphoras were brought to the museum by fisherman, amateur divers, and the British navy divers who carried out their training dives in this area in the 1960s. The artifacts are not published but they are exhibited in the Museum of Archaeology in Gozo; the suggested dates are by the author.

Notes to Chapter III

¹ For the archaeological evidence regarding the colonization of Cyprus see Alan H. Simmons, "Humans, Island colonization and Pleistocene extinctions in the Mediterranean: the view from Akrotiri *Aetokremnos*, Cyprus," *Antiquity* 65 (1991), 857-69; "Of tiny hippos, large cows and early colonists in Cyprus," *Journal of Mediterranean Archaeology* 11 (1998), 232-41; *Faunal Extinction in an Island Society: Pygmy Hippopotamus Hunters of Cyprus* (New York, 1999); Cyprian Broodbank, *An Island Archaeology of the Early Cyclades* (Cambridge, 2000), p. 113; John F. Cherry, "The First Colonization of the Mediterranean islands: A Review of Recent Research," *Journal of Mediterranean Archaeology* 3.2 (1990), 151-57.

² For details see Cherry, "The First Colonization," pp. 145-221.

³ Cherry, "The First Colonization," pp. 145-221.

⁴ Cherry, "The First Colonization," p. 191. Trump thinks that the earliest settlements would have been on the coast and these might now be submerged due to a considerable rise in the sea level since the tenth millennium B.C. That may be why we date the colonization of the island to a relatively late period. David H. Trump, "Some Problems in Maltese Archaeology," *Malta Archaeological Review* 3 (1999), 33.

⁵ John Davies Evans, *Malta* (London, 1959), pp. 45-47; David H. Trump, *Skorba. Excavations Carried out on Behalf of the National Museum of Malta, 1962-4* (London, 1966), pp. 21-24. According to the evidence presented by Camps, earliest colonists of Malta might have originated from the Agrigento/Sciacca region of Sicily: Gabriel Camps, "Le peuplement préhistorique des îles de la Méditerranée occidentale," in *Iles de Méditerranée: actes de la table ronde du groupement d'intérêt scientifique sciences humaines sur l'aire méditerranéenne, Aix-en-Provence, Octobre 1980* (Paris, 1981), pp. 129-30.

⁶ A certain degree of contact was maintained between the Maltese farmers and their Sicilian counterparts. On the relationship between *Red Skorba* and *Diana* cultures see Trump, *Skorba*, pp. 45-46; John Davies Evans, *The Prehistoric Antiquities of the Maltese Islands: A Survey* (London, 1971), p. 211; Anthony Bonanno, "Malta's Changing Role in Mediterranean Cross-currents. From Prehistory to Roman Times," in *Malta. A Case Study in International Cross-Currents*, ed. Stanley Fiorini and Victor Mallia-Milanes, Proceedings of the First International Colloquium on the History of the Central Mediterranean (Malta, 1991), p. 2.

⁷ Bonanno, "Malta's Changing Role," p. 2.

⁸ Also extending into the Italian Peninsula, eastern Sicily, and the Aeolian islands. Bonanno, "Malta's Changing Role," p. 2.

⁹ Regarding the developments of the Temple Period, Broodbank notes that "Whatever happened on Malta happened not because the island was intrinsically isolated, but because it was far

enough from other land, in Neolithic terms, to make itself isolated if its islanders wished it to be so." Broodbank, *An Island Archaeology*, p. 20.

¹⁰ Colin Renfrew, *Before Civilization. The Radiocarbon Revolution and Prehistoric Europe* (New York, 1974), pp. 147-48.

¹¹ Renfrew, *Before Civilization*, pp. 149-50.

¹² Bonanno, "Malta's Changing Role," p. 3.

¹³ It seems that the obsidian trade with Sicily, Lipari, and Pantelleria was not interrupted. For the sources of these imports see Trump, *Skorba*, pp. 49-50; Camps, "Le peuplement préhistorique," p. 2.

¹⁴ Trump, *Skorba*, p. 51.

¹⁵ Trump, *Skorba*, p. 51.

¹⁶ Bonanno thinks that this may be due to extreme adverse economic and, possibly, environmental conditions: Bonanno, "Malta's Changing Role," p. 4.

¹⁷ For a summary of the available information about the *Tarxien Cemetery* people see Evans, *Malta*, pp. 168-88; Trump, *Skorba*, pp. 43-44; Luigi Bernabò-Brea, "Eolie, Sicilia, a Malta nell'età del Bronzo," *Kokalos* 22-23 (1976-77), pp. 33-111.

¹⁸ Evans, *The Prehistoric Antiquities*, p. 224.

¹⁹ Evidence for contact during the Borg in-Nadur period (1500-700 BC) occurs at Syracuse in Sicily: Evans, *Malta*, p. 184.

²⁰ For a detailed analysis of this subject see Anthony Bonanno, "The tradition of an Ancient Greek Colony in Malta," *Hyphen* 4.1 (1983), 1-17; Giouliana Sluga Messina, "Malta e Omero," in *Missione a Malta. Ricerche e studi sulla preistoria dell'arcipelago Maltese nel contesto mediterraneo*, ed. Ariela Fradkin Anati and Emmanuel Anati (Milan, 1988), pp. 183-91; Hans-Helmut and Armin Wolf, *Der Weg des Odysseus. Tunis, Malta, Italien in den Augen Homers* (Tübingen, 1968).

²¹ Evans mentions a cylindrical bead inlaid with gold symbols (found in Tarxien) and a sherd: Evans, *Malta*, p. 164, pl. 84. For a reference to the similarities of the 'Cyclopean' construction technique of the Borg in-Nadur fortification and similar structures in Sicily and Mycenae see Evans, *Malta*, p. 185. Finally there is a single sherd of a Mycenaean IIIB cup found at Borg in-Nadur, which, according to Bonanno, "constitutes a physical import [of Mycenaean origin] providing proof, albeit isolated, of commerce with the Mycenaean world." For the sherd see Evans, *The Prehistoric Antiquities*, pp. 17, 227, fig. 42, pl. 32.6. For Bonanno's interpretation of this evidence see Bonanno, "Malta's Changing Role," p. 5. An opposing argument presented by Tusa rightly points out the possibility that the Mycenaean fragment could have reached the Borg

in-Nadur village through Sicily where archaeological evidence of Mycenaean commerce abounds: Sebastiano Tusa, *La Sicilia nella preistoria* (Palermo, 1992), pp. 367-69.

²² Evans, *The Prehistoric Antiquities*, p. 227.

²³ Claudia Sagona, "Silo or Vat? Observations on the Ancient Textile industry in Malta and Early Phoenician interests in the island," *Oxford Journal of Archaeology* 18.1 (1999), p. 25.

²⁴ Bonanno, "Malta's Changing Role," p. 6.

²⁵ For suggestions regarding Mycenaean trade routes reaching the Balearic Islands, see Spyridon Marinatos, "Les Egéens et les îles Gymnésiennes", *Bulletin de Correspondence Hellenique* 95.1 (1971), 5-11. Bonanno mentions that Malta is not one of the numerous places in the central and western Mediterranean with their name ending in 'oussa' such as Lopadoussa (Lampedusa) and Aljoussa (Linosa), on which archaeological finds have been made testifying to the penetration of Mycenaean commerce: Bonanno, "Malta's Changing Role," p. 6. For a summary of the artifacts of Mycenaean origin in Italy, Sicily, and Sardinia see Michel Gras, *Trafics Tyrrhéniens Archaiques* (Rome, 1985), pp. 57-61.

²⁶ Sagona, "Silo or Vat," pp. 51, 53.

²⁷ For several examples of exotic artifacts (i.e., faience beads and disk beads made of ostrich egg-shell), see Evans, *Malta*, pp. 173-75; for the idea that these exotic artifacts might have been exchanged for textiles see Sagona, "Silo or Vat," p. 53.

²⁸ Gras, *Trafics Tyrrhéniens*, pp. 302-03.

²⁹ Nancy K. Sandars, *The Sea Peoples: Warriors of the Ancient Mediterranean, 1250-1150 B.C.* (London, 1985).

Notes to Chapter IV

¹ For a summary of the Phoenician colonization of the western Mediterranean based on archaeological and literary evidence, see Sabatino Moscati, *Chi furono i fenici?* (Torino, 1994), pp. 83-94. For different views about much earlier dates (i.e., early twelfth century B.C.) for the Phoenician colonization of the western Mediterranean see Ora Negbi, "Early Phoenician Presence in the Mediterranean islands: A Reappraisal," *American Journal of Archaeology* 96 (1992), 599-615.

² Enrico Acquaro, "Along the routes of the Phoenicians," in *Along the Routes of the Phoenicians*, Catalog of itinerant exhibition on the Phoenician civilization (Rome, 1998), p. 17.

³ The problems are related to the fact that the ancient settlements on the Maltese Islands underwent extensive urbanization for centuries. For discussions see Antonia Ciasca, "Malta," in *L'espansione fenicia nel Mediterraneo: Relazioni del colloquio in Roma* (Rome, 1971), p. 64;

Anthony Pace, "Phoenician-Punic Malta," in *Along the Routes of the Phoenicians*, Catalog of Itinerant Exhibition on the Phoenician Civilization (Rome, 1998), p. 95.

⁴ Anthony Bonanno, "Evidence of Greek, Carthaginian and Etruscan Maritime Commerce South of the Tyrrhenian: the Maltese Case," in *Navies and Commerce of the Greeks, the Carthaginians and the Etruscans in the Tyrrhenian Sea. Proceedings of the European Symposium held at Ravello*, ed. Tony Hackens, PACT 20 (Strasbourg, 1988), p. 419; reprinted in "Malta's Role in the Phoenician, Greek and Etruscan Trade in the Western Mediterranean," *Melita Historica* 10.3 (1990), 209-24.

⁵ This date is based on the stylistic comparisons of the archaeological material from Ghajn Qajjied (Rabat) with artifacts from the Near East and Greece. Two Greek skyphoi dated to 720-620 B.C. were found in the same context as a Phoenician ampulla (oil bottle) point to the simultaneous existence of Phoenician and Greek imports: William Culican, "Phoenician Oil Bottles and Tripod Bowls," *Berytus* 19 (1970), 7; Pablo Vidal González, *La isla de Malta en época fenicia y púnica*, BAR International Series, 653 (Oxford, 1996), p. 17. One of the earliest archaeological contexts that included foreign, and, therefore, datable pottery was the tomb excavated at Ghajn Qajjied. This tomb (#105 in Sagona's classification) included Levantine pottery along with datable Greek imports, and was scientifically excavated: Claudia Sagona, *The Archaeology of Punic Malta* (Leuven 2002), pp. 39-49 and 808-12. A Corinthian skyphos found in a tomb at Ghajn Qajjied (near Rabat) dates to the second half of the eighth century: Thomas James Dunbabin, "The Greek Vases," in Godfrey Baldacchino, "Rock Tombs at Ghajn Qajjet, near Rabat, Malta," in *Proceedings of the British School at Rome* 8 (1953), pp. 39-41. For a discussion concerning the dating of the archaeological evidence for the earliest Phoenician presence in Malta, see Vidal González, *La isla de Malta*, pp. 17-18. It is possible that Greek pottery from the tomb at Ghajn Qajjet actually dates to the mid-seventh century B.C., pushing the earliest evidence for Phoenician presence to this period. For a detailed discussion about the dating of the Ghajn Qajjet tomb see Michel Gras, *Trafics Tyrrhéniens archaïques* (Rome, 1985), pp. 299-300. Bonanno agrees with this date and mentions that the archaeological evidence from Ghajn Qajjet, Mtarfa, and Qallilija tombs establishes a *terminus a quo* for the Phoenician presence in Malta, which dates to the first half of the seventh century B.C. Bonanno, "Evidence of Greek, Carthaginian and Etruscan," p. 419.

⁶ Moscati, *Chi furono i fenici*, p. 86; Sabatino Moscati, "Some Reflections on Malta in the Phoenician World," *Journal of Mediterranean Studies* 3: 2 (1993), 286.

⁷ Sagona characterizes this period as "orientalizing." Her Orientalizing period is a transition period between the first Phoenician contacts and the fully-fledged Phoenician colonization, and takes place between 1000-750 B.C. "Established Phase I" occurs between 750 and 620 B.C. For the chronological chart, see Sagona, *The Archaeology of Punic Malta*, p. 24; for a detailed discussion of the Archaic Phase I, see pp. 29-39; for Established Phase I, see pp. 39-49.

⁸ Anthony J. Frendo, "Religion in the 'Prehistoric Phases' of Phoenician Malta," in *Ritual, Rites and Religion in Prehistory. Third Deya International Conference of Prehistory*, eds., William H. Waldren, Joseph A. Ensenyat and Rex Claire Kennard, BAR International Series 611, 2 vols. (Oxford, 1995), 1: 115.

⁹ Paolo Brusasco, "Dal Levante al Mediterraneo Centrale: La Prima fase Fenicia a Tas-Silg, Malta," *Journal of Mediterranean Studies* 3: 1 (1993), 14.

¹⁰ Although this is not her view, for a summary of the argument, see Sagona, *The Archaeology of Punic Malta*, p. 26.

¹¹ *Borg in-Nadur* and *Bahrija* pottery is associated with the earliest layers of Phoenician occupation at Tas-Silg. Antonia Ciasca, "Malta," pp. 65-66, 72; Bonanno, "Evidence of Greek, Carthaginian and Etruscan," p. 420; Glenn E. Markoe, *Phoenicians* (Los Angeles, 2000), p. 180; Pace, "Phoenician-Punic Malta," p. 96.

¹² Pace mentions that the idea of co-habitation had been rejected by archaeologists so far, since ceramics belonging to different cultures were not found in the same archaeological layers. According to Pace re-utilization of Late Neolithic cult structures of Tas-Silg may suggest a convergence of cultural elements due to co-habitation: Pace, "Phoenician-Punic Malta," pp. 95-96.

¹³ Claudia Sagona, "Silo or Vat? Observations on the Ancient Textile industry in Malta and Early Phoenician Interests in the Island," *Oxford Journal of Archaeology* 18.1 (1999), p. 25; Sagona, *The Archaeology of Punic Malta*, p. 26. One has to remember that the reason for these debates is due to the thin soil of the Maltese Islands that makes the stratigraphy very hard to read. Detailed discussion in Vidal González, *La isla de Malta*, p. 15.

¹⁴ The choice of new and autonomous centers with well-defined features (i.e., promontories and small islands in front of the coast) characterizes the Phoenician presence in the Mediterranean area. Moscati, "Some Reflections on Malta," p. 287; Markoe, *Phoenicians*, p. 180; Pace, "Phoenician-Punic Malta," p. 96.

¹⁵ For example, the colonizers occupied native settlements both in the interior of the island (i.e., Mdina/Rabat), and on the coast (i.e., Tas-Silg where a Phoenician cult replaced the prehistoric one): Moscati, "Some Reflections on Malta," pp. 286-90; Markoe, *Phoenicians*, p. 180; Pace, "Phoenician-Punic Malta," p. 96; Bonanno, "Evidence of Greek, Carthaginian and Etruscan," p. 421.

¹⁶ Since much of the land around Rabat, Paola-Marsa and Victoria has been built over, and since excavation reports often contain insufficient information, today it is difficult to estimate precisely the land area covered by each of these three settlements: George A. Said-Zammit, *Population, Land Use and Settlement on Punic Malta*, BAR International Series 682 (Oxford, 1997), p. 43. The full extent of the urban area around Mdina cannot be ascertained but the numerous tombs found in surrounding necropolis or scattered across neighboring hills indicate a strong population density. Some of the more interesting imported material was excavated from tombs at Mtarfa and Rabat (i.e., protocorinthian wares, a Rhodian bird bowl, silver bangles, amulets, and a torch holder): Pace, "Phoenician-Punic Malta," pp. 96, 105. Numerous tombs excavated in the Grand Harbor area (i.e., tal-Liedna, Ghajn Dwieli, tal-Horr and Marsa) suggest a major urban settlement: Pace, "Phoenician-Punic Malta," p. 105. Sagona mentions the importance of Marsaxlokk as a harbor but also mentions the architectural and ceramic remains,

uncovered at Marsa, identifying this location as a port in the late-Punic and Roman periods: Sagona, *The Archaeology of Punic Malta*, p. 271. Other cemeteries were found in various parts of Malta. Large agglomeration of tombs suggest the existence of rural settlements at Zejtun, Siggiewi, Mosta, Bidnija, Bumarrad, San Pawl Milqi, and Ta' Kaccatura. Minor sanctuaries or shrines, such as those found at Ras ir-Raheb below the Bronze Age village of Bahrija and Ras il-Wardija (Gozo) were established in localities that have been chosen for their scenic value: Pace, "Phoenician-Punic Malta," p. 105.

¹⁷ The major concentration of burials is located in the main inland hill-site of Victoria: Markoe, *Phoenicians*, p. 180. Sagona thinks that Gozo must have contained comparable cemeteries to those of Malta, but they are yet to be discovered: Sagona, *The Archaeology of Punic Malta*, p. 273. Markoe suggests that the coastal settlement of Gozo was at Mgarr but this is highly unlikely because before the construction of the modern breakwater there, this bay was not a well-protected one: Markoe, *Phoenicians*, p. 80. Xlendi, Mgarr, and Sagona believes that Marsalforn and Ramla Bays were significant in the economic infrastructure of Punic Gozo and were connected to the inland site of Victoria via roads: Sagona, *The Archaeology of Punic Malta*, p. 273.

¹⁸ Pseudo-Skylax, *Periplus*, 111. The information is based on Graham Shipley's translation: "The Periplus of Pseudo-Skylax: An Interim Translation," forthcoming.

¹⁹ Markoe, *Phoenicians*, p. 180; Vidal González, *La isla de Malta*, p. 19; Sagona, *The Archaeology of Punic Malta*, p. 271; Moscati, "Some Reflections on Malta," p. 288.

²⁰ Astarte was a deity who protected the navigation routes of the Mediterranean: Vidal González, *La isla de Malta*, p. 20.

²¹ Diodorus lived in ca. 90-21 B.C. Diodorus was born in Agyrium (Sicily), and his writing was a compilation of earlier sources available to him and the information collected during his own travels. This forty-volume history is written in Greek and covers the story of the human race from Creation to the times of Diodorus in the late Roman Republic, ending with Caesar's Gallic Wars. Although some historians regard Diodorus as uncritical and unreliable, most scholars accept that the information he presents is generally correct when he speaks from his own observation. Because of the proximity of his hometown to Malta, it is likely that Diodorus' information regarding Malta was based on firsthand observations and, therefore, reliable. For the original text, which includes all the information below regarding Malta and Gozo, see Diodorus Siculus, *Bibliotheca Historica* V. 12. 1-4. Some parts of the text specifically refer to the Phoenicians, but some parts must be based on Diodorus' contemporary information. Therefore, latter parts of the text will be discussed in detail in the next chapter about Roman Malta.

²² John Samut Tagliaferro, *Malta. Its Archaeology and History* (Narni, 2000), p. 38; Joseph S. Abela, *Malta. A Panoramic History* (San Gwann, Malta, 1997) p. 40; Anthony Bonanno, "Malta's Role in the Phoenician, Greek and Etruscan Trade in the Western Mediterranean," *Melita Historica* 10.3 (1990) p. 215.

²³ It has even been suggested that there were shipyards on Malta. This is obviously unlikely as the shortage of wood, which begun in the prehistoric era, would make this type of production unlikely. For the beginning of deforestation of the island in the prehistoric era based on pollen analysis, see David H. Trump, *Skorba and the Prehistory of Malta* (London 1966) p. 51. About the possibility of ship repairs being conducted in Malta see Vidal González, *La isla de Malta*, p. 95.

²⁴ However, this scenario would bring us back to the problem of unidentified Maltese export product. In the absence of such commercial production, it is hard to imagine that Malta imported enough food to provision passing ships.

²⁵ Bonanno's interpretation of this text: "Diodorus tells us that the Phoenicians set up a colony in Malta because they found in it good harbors that offered safe shelter because it was situated out in the open sea, that is, away from the bases of their Greek rivals and on the direct sea route that connected Phoenicia with its western colonies. We are also told that through their contact with the Phoenicians, the Maltese inhabitants strengthened their economy, particularly by textile production, raised sensibly their standard of living, as well as established a good reputation for themselves." Anthony Bonanno, "Archaeology," in *Malta. Culture and Identity*, ed. Henry Frendo and Oliver Friggieri (Malta, 1994), p. 93.

²⁶ Diodorus mentions that the Maltese population received Phoenician assistance "... in many respects ..." and states clearly that this assistance reached the island "... through the sea-merchants." Diodorus Siculus, *Bibliotheca Historica* V. 12. 1-4.

²⁷ Anthony Bonanno mentions that Diodorus' account make it clear that the Maltese harbors provided an occasional shelter, and they may have been a port of call, but they were not a port of trade. Bonanno, "Evidence of Greek, Carthaginian and Etruscan," pp. 421-22; Anthony Bonanno, "Malta's Role in the Phoenician, Greek and Etruscan Trade in the Western Mediterranean," *Melita Historica* 10.3 (1990) p. 214.

²⁸ For a detailed study about the establishment of the Straits of Messina as the main point of crossing towards the western basin of the Mediterranean, see Georges Vallet, "Après le XXVI^e Convegno di studi sulla Magna Grecia: quelques réflexions sur le détroit de Messine," in *Navies and Commerce of the Greeks, the Carthaginians and the Etruscans in the Tyrrhenian Sea. Proceedings of the European Symposium held at Ravello*, ed. Tony Hackens, PACT 20 (Strasbourg, 1988), pp. 161-72. For a general review of the geographical conditions affecting navigation in ancient Mediterranean, see Jean Rougé, *Recherches sur l'organisation du commerce maritime en Méditerranée sous l'empire Romain* (Paris, 1966), pp. 31-39.

²⁹ One has to admit that the Greek colonies such as Zankle and Rhegion were positioned to control the straits of Messina, but considering the size of the straits, and the ships of the period, this control is not likely to have been prohibitive. Moreover, the commercial system clearly allowed the Phoenicians and Greeks to co-exist without major conflicts.

³⁰ Currents are not a determining factor in the Mediterranean, as they generally do not exceed two knots, except for a few specific areas where they can be dangerous, such as the Straits of

Gibraltar, Syrtis Major, and where the Ionian Sea meets the Adriatic. Here, I would like to concentrate on how the currents affect the navigation in the central Mediterranean region in particular. Maria Eugenia Aubet, *The Phoenicians and the West* (Cambridge, 1993), pp. 133-67. For a detailed study, see Danny L. Davis, "Navigation in the Ancient Eastern Mediterranean," (M.A. thesis, Texas A&M University, 2001). Also see Cicero, *In verrem* II. IV. 46 § 103.

³¹ Localized winds that blow from the south at the end of the summer (generally around late August and early September), which might help the ships in their journey to Sicily. These winds blow from the African coast, and bring very hot desert weather, and sometimes sand.

³² Thucydides VII, 13 and VII, 50.

³³ According to Aubet, especially the Phoenician ships loaded with metals on their return from the Iberian Peninsula sailed with the currents and, therefore, followed the African coast: Aubet, *The Phoenicians and the West*, p. 156.

³⁴ Aubet, *The Phoenicians and the West*, p. 158 and figure on page 161. Glenn E. Markoe, "In Pursuit of Metal: Phoenicians and Greeks in Italy," in *Greece between East and West: 10th-8th Centuries BC*, ed. Günter Kopcke and Isabelle Tokumaru, Papers of the Meeting at the Institute of Fine Arts (Mainz, Rhine, 1992), pp. 80-84.

³⁵ Markoe, "In Pursuit of Metal," p. 80.

³⁶ According to Markoe, there is enough archaeological evidence to suggest the existence of Phoenician metalworking ateliers established in Etruria to produce luxury objects made by Phoenician craftsmen for the Etruscan aristocratic clientele, such as silver plates: Markoe, "In Pursuit of Metal," pp. 81, 84.

³⁷ Vidal González, *La isla de Malta*, p. 114.

³⁸ The Euboean colony of Zankle was founded in late 8th century B.C. Among the colonies founded by other Greek city-states was Megara Hyblaea (727), a colony of Megara.

³⁹ Some of the basic books that provide general information regarding the Greek colonization of the west are David Randall-MacIver, *Greek Cities of Italy and Sicily* (Oxford, 1931); Thomas James Dunbabin, *The Western Greeks. The History of Sicily and South Italy from the foundation of the Greek colonies to 480 B.C.* (Oxford, 1968); Arthur Geoffrey Woodhead, *The Greeks in the West* (New York, 1966).

⁴⁰ For the earliest evidence of Greek imports see the discussion about the finds of the tomb at Ghajn Qajjied, above. It is now concluded that Malta was never a Greek colony but the important corpus of the seventh-century orientalizing and archaic Greek pottery indicate the frequency of Greek visits to the island in that period. About the tradition that suggests that Malta was a Greek colony between the eighth and the sixth centuries B.C., see A.A. Caruana, *Report on the Phoenician and Roman Antiquities in the Group of the islands of Malta* (Malta, 1882), pp. 1, 77-80. For a review of the scholarly debate about the Greek colonization of Malta see

Anthony Bonanno, "The Tradition of an Ancient Greek Colony in Malta," *Hyphen* 4.1 (1983), 1-17. Also, see Vidal González, *La isla de Malta*, p. 114. Sometimes this incorrect information (of Malta being a Greek colony) is repeated in recent works with references to these early publications. Stefan Goodwin, *Malta. Mediterranean Bridge* (London, 2002), p. 5.

⁴¹ Himera was a colony founded by the Zankleans and Selinus was established by the Megaran colony of Megara Hyblaia. The reason why Selinus appears as a Punic colony on some maps is because it was conquered by the Carthaginians in 409-406 B.C: Sabatino Moscati, "The Carthaginian Empire," in *The Phoenicians*, ed. Sabatino Moscati (Milan, 1988), p. 57.

⁴² One should keep in mind that the Greek colonies competed and struggled with each other as much as they did with the Phoenician settlements. It would be a mistake to see the Greek colonies as a single unit against the Phoenician area of influence.

⁴³ Ciasca sees this situation as an antique example of 'guerre de course,' in which the Phoenician ships based in Malta preyed upon Greek ships sailing along the southern coast of Sicily: Ciasca, "Malta," pp. 96-97. Markoe states that "The importance of the Maltese harbors possibly further increased as the Phoenicians gradually lost the control of eastern Sicily to Greek colonization in the seventh century B.C.": Markoe, *Phoenicians*, p. 180. Some scholars think that the Phoenician occupation of Malta led the Greeks to seek another passage further north, which led to the colonization of Messina. However, this view is not plausible since Messina is a more convenient crossing. For these views, see Roger Dion, *Aspects Politiques de la Géographie Antique* (Paris, 1977), 65-66; Anthony Bonanno, "Malta's Changing Role in Mediterranean Cross-currents. From Prehistory to Roman Times," in *Malta. A Case Study in International Cross-Currents*, ed. Stanley Fiorini and Victor Mallia-Milanes, Proceedings of the First International Colloquium on the History of the Central Mediterranean (Malta, 1991), p. 8.

⁴⁴ That the Maltese Islands surrendered easily to attackers (i.e., Roman raids during the first and the second Punic wars) shows that the islands were insufficiently defended: Ciasca, "Malta," pp. 73-74.

⁴⁵ According to Ciasca, the location of the urban centers of Malta and Gozo support the argument that the naval force of Malta was a weak one, and could only pose a minor threat, and did not represent a defensive force against any serious attack. The fact that Malta could not resist the Roman attacks during the Punic wars is an indication of the defensive strength of the island. The largest settlements on both islands, Mdina in Malta and Victoria/Rabat in Gozo, are both on the hills at the middle of the islands, as far away from the sea as possible. They both are on the highest hills of each island, and it is likely that they were also reinforced by fortifications. Ciasca, "Malta," p. 73. Caruana notes that the Carthaginians held the islands of Malta as a military station, without establishing a colony. Although Caruana's publication is dated, his idea is plausible, as the temporary base theory would explain the extraordinary weakness of Malta during the Roman attacks. A.A. Caruana, *Report on the Phoenician and Roman Antiquities in the Group of the Islands of Malta* (Malta, 1882), p. 80.

⁴⁶ The two walled cities were used as the standard fortified strongholds, like those of the medieval era, could shelter the population in case the raids from the outside. Ciasca, "Malta," p.

74. For piracy in the Tyrrhenian that might have effected the south of Sicily as well see Gras, *Trafics Tyrrhéniens*, pp. 514-22.

⁴⁷ As opposed to a shipping line that goes through Carthage or Motya. Based on his study of excavation reports from these sites, Vidal González suggests that "... there is nothing of Carthaginian and Motyan production, but all is from Eastern origin." For a list of references to the excavation reports, see Vidal González, *La isla de Malta*, p. 96. For the archaeological evidence of a direct eastern connection see Moscati, "Some Reflections on Malta," pp. 286-90; Ciasca, "Malta," p. 72.

⁴⁸ Moscati mentions that "... on the contrary, there do not seem to be specific connections with Carthage nor with Punic Sicily." Moscati, "Some Reflections on Malta," pp. 288-89. Opposing this view, Gras mentions that Malta was 'attached' to Sicily since the Bronze Age and remained in this status during the seventh century B.C. Thus, most Phoenician artifacts found in Malta actually came through Sicily. Gras, *Trafics Tyrrhéniens*, p. 300-304. Gonzales thinks that the Maltese Islands always traded with Sicily but at the Phoenician period numerous oriental influences (architectural elements in the Tas-Silg temple, as well as ceramics of this period) started to infiltrate the culture directly from the east. According to Vidal González, these are evidences of direct contact between Malta and the Levantine coast: Vidal González, *La isla de Malta*, p. 96.

⁴⁹ Ciasca, "Malta," p. 74-75. Ivory plaque of the last quarter of the sixth century B.C. found in Ras il-Raheb establishes the existence of the contacts with the Etruscan world. However, it should be kept in mind that this could be a prestige item kept in a family over time or an item brought to Malta by pirates. Vidal González, *La isla de Malta*, p. 97.

⁵⁰ Archaeological discoveries of ceramics of Syro-Palestinian, Greek, Rhodian, Cypriot or north-African origin in Maltese contexts suggests that a certain amount of trade took place in this period. Evidence of trade links and resulting cultural contacts, either directly with cities, the Eastern Mediterranean or along the Carthage-Sicily axis, is strongly supported by the presence of such items as protocorinthian and Rhodian wares, a Cypro-Phoenician torch holder, numerous metal objects, amulets as well as amphorae emanating from different Mediterranean sources. Conversely, examples of some of the more distinctive items from Phoenician-Punic Malta, such as the ovoid neckless amphora, small ceramic vessels richly decorated with typical reddish bands, branches of flowers, lamps as well as cinerary urns have been discovered at such locations as Carthage, Lilybaeum, Motya, Camarina, Cagliari, and Ibiza (in a third century context): Pace, "Phoenician-Punic Malta," p. 105.

⁵¹ Gonzales mentions that another issue suggested (in theory but based on the archaeological material, namely fragments of ivory found at Tas Silg) by Moscati and Bondi is the existence of a local group of highly skilled craftsmen of possibly oriental origin. According to this hypothesis, a group of artisans worked in an ivory workshop in Malta and produced works following oriental templates: Vidal González, *La isla de Malta*, pp. 94-95. Diodorus mentions that the inhabitants of the Maltese Islands were skilled craftsman especially in weaving linen and producing fabrics that are remarkably sheer and soft. Although this description is for the Roman Period, it is possible that the production started earlier: Diodorus Siculus, *Bibliotheca Historica*

V. 12. 1-4. Ciasca mentions that the islands must have exported very little merchandise, because large containers from Malta occur with far less frequency outside the islands than those of smaller dimensions. Antonia Ciasca, "Nota sulla distribuzione di alcune ceramiche puniche maltesi," in *Histoire et archéologie de l'Afrique du Nord*, ed. Serge Lancel, Bulletin archéologique du Comité des travaux historiques et scientifiques 19 (Paris, 1985), pp. 23-24. Hypothetically, it is possible to conceive that the islands produced salted fish, oil, and wine. See the discussion in Anthony J. Frendo and Nicholas C. Vella, "Les îles phéniciennes du milieu de la mer," *Les dossiers d'archéologie* 264 (2001), 50-51.

⁵² J. Busuttil, "The Maltese Textile Industry in Antiquity," *Melita Historica* 4:3 (1966) p. 216.

⁵³ Sagona also says that there is enough evidence to suggest an extensive textile industry at Marsaxlokk Bay, where purple dye was produced through processing farmed or harvested murex: Sagona, *The Archaeology of Punic Malta*, p. 272.

⁵⁴ There are very few Carthaginian artifacts found on Malta such as the *portamuleti* and the *protome* found in Tas-Silg. For a list of the archaeological objects of Carthaginian origin, see Ciasca, "Malta," pp. 72-74; Moscati, "Some Reflections on Malta," p. 289; Vidal González, *La isla de Malta*, p. 96.

⁵⁵ The scarcity of the archaeological material in the sixth and fifth centuries suggest a decreased population during these periods when the rupture of trans-Mediterranean travels brought Malta back to its former status of isolation: Vidal González, *La isla de Malta*, pp. 96 and 114. Greek influence seen in the changing fashions of the typical local Punic pottery style and the Greek language finds itself in company with the Punic one on the bilingual candelabra *CIG*, iii, 5753; *IG*, xiv, 600. 44.

⁵⁶ Vidal González, *La isla de Malta*, p. 97. Bonanno also agrees that Maltese documentation indicates strong links with the Greek colonies of Sicily and Magna Graecia rather than with the rest of the Punic world in the fifth and fourth centuries: Bonanno, "Evidence of Greek, Carthaginian and Etruscan," p. 424. For the population increase between the third century B.C. and the first century A.D., see Said-Zammit, *Population, Land Use and Settlement*, (especially the figures presented on p. 41). For archaeological evidence of migrations from Malta to Carthage, Ibiza, and Leptis in the fourth and third centuries see Ciasca, "Nota sulla distribuzione," pp. 23-24.

⁵⁷ Both the furniture and the new pottery examples (i.e., the late oinokoi, the ovoid amphoras, the two handle jars or the imitation kylikes) found in these tombs all show originality and point to new contacts with the Hellenic world: Vidal González, *La isla de Malta*, p. 114.

⁵⁸ Vidal González, *La isla de Malta*, p. 115.

⁵⁹ S. C. Bakhuizen, "The Tyrrhenian Pirates: Prolegomena to the Study of the Tyrrhenian Sea," in *Navies and Commerce of the Greeks, the Carthaginians and the Etruscans in the Tyrrhenian Sea. Proceedings of the European Symposium held at Ravello*, ed. Tony Hackens, PACT 20 (Strasbourg, 1988) pp. 30-31.

⁶⁰ Coins with Punic legends struck in Malta and Pantelleria as late as the second and first centuries B.C.: Bonanno, "Malta's Changing Role in Mediterranean," p. 11; Sabatino Moscati, *The World of the Phoenicians* (London, 1973), p. 239.

⁶¹ Ciasca, "Malta," pp. 72-73; Moscati, "Some Reflections on Malta," pp. 289-90.

⁶² Bonanno, "Evidence of Greek, Carthaginian and Etruscan," p. 417-428.

⁶³ Bonanno, "Malta's Changing Role in Mediterranean," p. 7.

⁶⁴ Acquaro, "Along the routes of the Phoenicians," p. 21.

Notes to Chapter V

¹ For background information regarding the emergence of Roman navy and the establishment of a Mediterranean-wide commercial system see Lionel Casson, *The Ancient Mariners* (New York, 1959), pp. 157-72; for additional information about the Roman maritime affairs, see pp. 206-39.

² For a detailed study of Roman commercial organization and administration see Jean Rougé, *Recherches sur l'organisation du commerce maritime en Méditerranée sous l'empire Romain* (Paris, 1966).

³ For the role of other allies such as Rhodes in patrolling the seas in the early republican era see Casson, *The Ancient Mariners*, pp. 166, 173-188, 214, 239.

⁴ For detailed information see, James Inner Miller, *The Spice Trade of the Roman Empire, 29 BC to AD 641* (Oxford, 1969).

⁵ In this period the links of Malta were stronger with Greek colonies of Sicily than with the rest of the Punic world. Ceramics of Maltese origin were found in Sicilian settlements and there are more Greek and Italic type amphorae in Maltese archaeological contexts than Punic commercial amphorae of foreign production. From the fourth century onwards, Greek imports are replaced with south Italian ones, including ceramics from the Lagynos group. Some jewelry seems to be attributable to Tarentine production. Anthony Bonanno, "Evidence of Greek, Carthaginian and Etruscan Maritime Commerce South of the Tyrrhenian: the Maltese Case," in *Navies and Commerce of the Greeks, the Carthaginians and the Etruscans in the Tyrrhenian Sea. Proceedings of the European Symposium held at Ravello*, ed. Tony Hackens, PACT 20 (Strasbourg, 1988), p. 424; reprinted in "Malta's Role in the Phoenician, Greek and Etruscan Trade in the Western Mediterranean," *Melita Historica* 10.3 (1990), 209-24.

⁶ The typical Etruscan bucchero ware has not been found in Malta, but there are two ivory plaques of Etruscan type found in Malta. One dates to the sixth century B.C. and was found in a later context, and the second dates to the first half of the fourth century B.C. Bonanno,

“Evidence of Greek, Carthaginian and Etruscan,” p. 425. It is likely that the first piece was brought to Malta at a later date, and these two isolated finds are not likely to indicate a direct contact with the Etruscans.

⁷ Anthony Bonanno, “Aspects of the Socio-Economic Structure of Roman Maritime Commerce,” in *Le commerce maritime romain en Méditerranée occidentale*, ed. Tony Hackens and Marta Miró, PACT 27 (Rixensart, 1990), p. 47.

⁸ Naevius (264-195 B.C.) was one of the earliest of the Latin dramatists. He was an Italian born in Campania, though probably not a Roman citizen. At least two of his plays, however, were built upon historical events, with the theme taken from Roman history but composed in Greek form. Naevius served in the first Punic War (264-241 B.C.), and his *De Bello Punico* (*Bellum Punicum*) is considered the first Latin epic. This work has survived only in fragments. In his plays, Naevius satirized Roman society from the perspective of a plebeian. Forced to leave Rome, he retired to Utica in Africa.

⁹ The original section providing information about Malta reads: “Transit Melitam Romanus exercitus, insulam integram / urit populatur, vastat, rem hostium concinnat.” Gnaeus Naevius, *Belli Punici carminis quae supersunt* 4.32.39, ed. Wladyslaw Strzelecki (Leipzig, 1964), p. 15 and notes on xxviii.

¹⁰ F.P. Rizzo, “Malta e la Sicilia in età Romana: aspetti di storia politica e costituzionale,” in *Kokalos* 22-23 (1976-77), 184-189. According to Moscati’s interpretation, this date is more likely to be either 256 or 253 B.C.: Sabatino Moscati, *The World of the Phoenicians* (London, 1973), p. 238.

¹¹ Paulus Orosius, 4.8. The name of the consul in Orosius’ text is *Atilius*. This consul, Atilius Regulus, is also mentioned by Appian, as he plays a role in peace negotiations at the end of the First Punic War, leading to the Carthaginian loss of Sicily and the neighboring islands. Appian does not mention Malta specifically: Appian, *Roman History* 5. 2. 1.

¹² Titi Livi, *Ab Urbe Condita* 21.51. Livy (59 B.C.-A.D. 17) is referring to events about one century before his time.

¹³ Moscati, *The World of the Phoenicians*, p. 238.

¹⁴ Pseudo-Skylax, *Periplus*, 111.

¹⁵ Pablo Vidal González, *La isla de Malta en época fenicia y púnica*, BAR International Series, 653 (Oxford, 1996), p. 92.

¹⁶ A.A. Caruana, *Report on the Phoenician and Roman Antiquities in the Group of the Islands of Malta* (Malta, 1882), p. 79.

¹⁷ Thomas Ashby, “Roman Malta” *Journal of Roman Studies* 5 (1915), 34-43; Anthony Bonanno, *Roman Malta* (Malta, 1992), pp. 19-24.

¹⁸ Bonanno, *Roman Malta*, p. 22.

¹⁹ *Corpus Inscriptionum Latinarum* 10.7494; dated between 27 B.C. and A.D.14.

²⁰ Edward Coleiro, "Rapporti di Malta con la Sicilia nell'era repubblicana, testimonianze numismatiche e letterarie," *Kokalos* 22-23 (1976-77), 382.

²¹ Bonanno, *Roman Malta*, p. 15.

²² A.A. Caruana, *Report on the Phoenician and Roman Antiquities in the Group of the Islands of Malta* (Malta, 1882), p. 118; Bonanno, *Roman Malta*, p. 14-15; Moscati, *The World of the Phoenicians*, p. 239. Archaeological evidence shows that in the early Roman period the indigenous Punic culture was hardly affected by the new rulers: T. C. Gouder, "Phoenician Malta," *Heritage* 1 (1979), 185.

²³ Claudii Ptolemaei, *Geographia* 4.3.13, ed. Carolus Müllerus (Paris, 1901), pp. 662-63. Both the positions of Gozo (38° 20' 34° 40') and Malta (38° 45' 34° 40') were provided.

²⁴ Diodorus Siculus, *Bibliotheca Historica* 5.12.1-4.

²⁵ See Chapter IV.

²⁶ The only feasible way to produce linen in Malta is to import flax, as this water-consuming crop would have been impossible to grow in Malta: Joseph Busuttil, "The Maltese Textile Industry in Antiquity," *Melita Historica* 4.3 (1966), 216; Vidal González, *La isla de Malta*, p. 95.

²⁷ Verres was the governor of Sicily (and, therefore, of Malta) and was standing trial at the time these orations were composed.

²⁸ It appears that it was unusual for the governors not to visit their jurisdiction area: Cicero, *In verrem* 2.4.46 § 103.

²⁹ Busuttil, "The Maltese Textile Industry," p. 216.

³⁰ Cicero, *In verrem*, 2.4.46 § 103. The temple in question here is the one discovered at Tas-Silg: Anthony Pace, "Phoenician-Punic Malta," in *Along the Routes of the Phoenicians: Catalog of Itinerant Exhibition on the Phoenician Civilization* (Rome, 1998), p. 96.

³¹ Cicero, *In verrem*.

³² The Tyrrhenians had a reputation for buccaneering. The name was probably a catch-all for the various groups that operated in the Tyrrhenian sea west of Italy: Etruscans, Italians, Sardinians, and Greeks from South Italy. Dionysius I of Syracuse managed to hold them down, but when he died they recovered quickly. The Illyrians of the Croatian coast were a particularly virulent

breed. They designed a boat so light and fast –the *liburnian*- that the Romans paid them the compliment of adopting it as a standard naval craft of their own: Casson, *The Ancient Mariners*, pp. 200-01.

³³ Casson, *The Ancient Mariners*, p. 200-01.

³⁴ Crete was invaded in 74 B.C. by M. Antonius (father of the future triumvir Mark Anthony), but according to Busuttil, this did not really accomplish anything: Joseph Busuttil, “Pirates in Malta,” *Melita Historica* 5.4 (1971), 308.

³⁵ For a detailed study of piracy in the Graeco-Roman world see, Philip de Souza, *Piracy in the Graeco-Roman World* (Cambridge, 1999).

³⁶ Cicero, *In verrem*, I. IV.13

³⁷ Busuttil, “Pirates in Malta,” pp. 308-10.

³⁸ Busuttil, “Pirates in Malta,” p. 309. The ships sailed quite frequently in the winter as well. Bulk shipping of profitable goods such as grain no doubt stopped in the winter, as this shipment is related to the harvest season but the pirates who attacked coastal towns must have been active in the winter as well.

³⁹ Vidal González, *La isla de Malta*, p. 95.

⁴⁰ Unfortunately, the area was overbuilt since 1768 and these Roman structures have not been available for study.

⁴¹ Carl’Antonio Barbaro, *Degli avanzi d’alcuni antichissimi edifizj, scoperti in Malta l’anno 1768; dissertazione storico-critica* (Malta, 1794).

⁴² He explains that since cremation was not common among the Phoenicians these urns must have dated to the Greek periods or Roman occupation: Barbaro, *Degli avanzi d’alcuni antichissimi edifizj*, pp. 25-27.

⁴³ Barbaro, *Degli avanzi d’alcuni antichissimi edifizj*, pp. 31-40.

⁴⁴ For the plan of the remains see, Barbaro, *Degli avanzi d’alcuni antichissimi edifizj*; Thomas Ashby, “Roman Malta” *Journal of Roman Studies* 5 (1915), 28-29.

⁴⁵ Ashby, “Roman Malta” p. 29. Barbaro also mentions that the buildings were abandoned or destroyed during the period of Arab occupation: Barbaro, *Degli avanzi d’alcuni antichissimi edifizj*, p. 41.

⁴⁶ Bonanno, *Roman Malta*, pp. 25-26, 55.

⁴⁷ Ashby, “Roman Malta” p. 29.

⁴⁸ *Museum Annual Reports* 1959-1960, p. 5.

⁴⁹ For example: “Underwater excavations reveal that during this period the Maltese Islands apparently had frequent trading contacts with the outside world. The remains of several Roman cargo shipwrecks, identified within the maritime limits of these islands, indicate trading contacts not only with Sicily and south Italy, but also with North Africa: George A. Said-Zammit, *Population, Land Use and Settlement on Punic Malta*, BAR International Series 682 (Oxford, 1997), p. 44.

⁵⁰ *Museum Annual Reports* 1961, p. 7; *Museum Annual Reports* 1962, p. 4; *Museum Annual Reports* 1963, p. 7; *Museum Annual Reports* 1964, p. 7; *Museum Annual Reports* 1965, p. 4; *Museum Annual Reports* 1967, pp. 7-8.

⁵¹ Acts. 27.40. Saint Paul’s ship could not avoid wrecking but the objective of cutting the anchor lines was to “beach” the ship safely in the nearby inlet. It was a possibility that the ship might have been saved and repaired, and there is no doubt that many ships who cut their anchor lines and abandoned their anchors around the islands did not sink. It is also possible that they sank in a location far from the site of the anchor, like Saint Paul’s ship. Thus, anchors do not necessarily point to shipwreck sites.

⁵² An example of this practice can be seen in the part describing Saint Paul’s ship doing exactly this after a storm off Crete. See Acts. 27.18 and 27.38.

⁵³ The majority of the references in the above mentioned museum reports refer to items such as an isolated broken amphora neck found in fishing nets or an amphora that has been “seen” by a sport diver. In other words, there is no indication that these locations represent shipwreck sites.

⁵⁴ Ayşe D. Atauz and John McManamon, “Underwater Survey of Malta: The Reconnaissance Season of 2000,” *INA Quarterly* 28:1 (2001), 24-25.

⁵⁵ This mistake is frequent in literature. See Anthony Bonanno’s remark: “Salina Bay too must have served as a small harbor since it appears to have hosted some harbor activity in antiquity judging from a number of Roman lead anchors discovered in or just outside it.” Bonanno, *Roman Malta*, p. 25. For archaeological evidence from the Salina Bay see *Museum Annual Reports* 1961, p. 7; *Museum Annual Reports* 1962, p. 7; *Museum Annual Reports* 1963, p. 7; *Museum Annual Reports* 1964, p. 7; *Museum Annual Reports* 1967, p. 8.

⁵⁶ Glenn E. Markoe, *Phoenicians* (Los Angeles, 2000), p. 180; Claudia Sagona, *The Archaeology of Punic Malta* (Leuven, 2002), p. 273.

⁵⁷ Giovanni Pietro Francesco Agius de Soldanis, *Della lingua punica presentemente usata da Maltesi* (Rome, 1750), ff. 96-204; Jean-Pierre-Laurent Houel, *Voyage pittoresque des isles de Sicile, de Malte et de Lipari*, 4 vols. (Paris, 1782-1787), 4: 77.

⁵⁸ Markoe, *Phoenicians*, p. 180.

⁵⁹ Sagona, *The Archaeology of Punic Malta*, p. 273.

⁶⁰ *Museum Annual Reports* 1961, pp. 6-7.

⁶¹ Malta may have produced local pottery in the form of commercial jars or amphoras, possibly to contain olive oil, wine or honey of the island. However, the volume of Maltese exports cannot be determined based on the quantity of Maltese amphoras found outside the island, since not every amphora made in Malta carried Maltese products; also it is difficult to determine which specific containers were produced in Malta itself: Vidal González, *La isla de Malta*, p. 95. Kiln sites have never been identified on the islands. There are ongoing archaeometrical studies and clay analyses awaiting results by the Universities of Bonn and the Melbourne (Drs. Hans Mommsen and Claudia Sagona carrying out the tests in these institutions respectively). Thus, more information may be available regarding the local pottery production in Malta in the years to come. Nicholas Vella, letter to author, December 11, 2003.

⁶² Villas, like that of Burmarrad, indicate extensive dry-farming activities, with a major specialization in the extraction of olive oil. Said-Zammit, *Population, Land Use and Settlement*, p. 44.

⁶³ Possible Maltese commercial products are textiles, oil, salt, and perhaps a continuation of the earlier dye industries. As discussed in the previous chapter, identification and dating of the dye industry in Malta is almost impossible. The same is true for the saltpans that are carved on the rocky shore of Malta. In either case, both salt and the purple dye would have been industries that were monopolized by the Roman State, and would not have created much maritime traffic and economic activity around the island. About the state monopoly of these products, see Jean-Michel Carrié, "Les échanges commerciaux et l'État antique tardif," *Économie antique. Les échanges dans l'Antiquité: le rôle de l'État* (Toulouse, 1994), p. 181.

⁶⁴ Acts. 28.1-11.

⁶⁵ For a review of different opinions about the interpretation of the passage (Acts. 28.1-11) see Frederick Fyvie Bruce, *The Acts of the Apostles: The Greek Text with Introduction and Commentary* (Leicester, 1990), pp. 508-10. Bruce dates the event to A.D. 59, Bruce, *The Acts of the Apostles*, p. 515; according to Smith's interpretation the shipwreck event must have occurred shortly before Luke wrote the account in A.D. 63: James Smith, *The Voyage and Shipwreck of Saint Paul with Dissertations on the Life and Writings of Saint Luke, and the Ships and Navigation of the Ancients*, 4th ed. (Michigan, 1978), p. 166; Bugahiar dates the incident to around A.D. 58; Mario Buhagiar, "The Saint Paul Shipwreck Controversy. An Assessment of the Source Material," *Proceedings of History Week* (1993), 181.

⁶⁶ Richard P. C. Hanson, "The Journey of Paul and the Journey of Nikias," in *Studies in Christian Antiquity* (Edinburgh, 1985), p. 22.

⁶⁷ Hans Conzelmann, Eldon Jay Epp and Christopher R. Matthews, *Acts of the Apostles: A Commentary on the Acts of the Apostles* (Philadelphia, 1987), pp. 215-21.

⁶⁸ For a summary of this debate and a bibliographical list of published material, see Bruce, *The Acts of the Apostles*, pp. 518, 530; Smith also discusses the identification of Malta as the Melita of the Acts in a supplemental chapter at the end of his book: Smith, *The Voyage and Shipwreck of Saint Paul*, pp. 162-80. Another review of the material regarding the identification of Malta as the shipwreck site, which includes the Capri and Lesbos options, can be found in Buhagiar, "The Saint Paul Shipwreck Controversy," pp. 186-92.

⁶⁹ See the relevant section in Smith's study about the wind Euroclydon: Smith, *The Voyage and Shipwreck of Saint Paul*, pp. 159-61.

⁷⁰ Bruce, *The Acts of the Apostles*, p. 515.

⁷¹ This wind, *Euroaquilo*, is identified as the modern *grigal* or *gregale*, which typically blows from east-northeast in this season. It was encountered on Roman wind-roses. For detailed information regarding the identification of Euroclydon and literary references regarding its nature, see Bruce, *The Acts of the Apostles*, p. 518.

⁷² Acts. 27.14-17.

⁷³ Acts. 27.18 and 38.

⁷⁴ About the calculation of the time passed at sea, see Smith, *The Voyage and Shipwreck of Saint Paul*, pp. 126-28.

⁷⁵ Most biblical scholars identify the modern Saint Paul's Bay, named after the tradition, as the place where the ship ran aground and the survivors landed on Malta. For a review of sources, see Horatio Caesar Roger Vella, "Quintinus (1536) and Saint Paul's shipwreck in Malta," *Melita Historica* 8.1 (1980), 61-64. For a compilation of more recent sources, see Bruce, *The Acts of the Apostles*, p. 526; Smith, *The Voyage and Shipwreck of Saint Paul*, pp. 245-50. However, there are other opinions based on different interpretations of the original text that the ship might have ran aground on different sites along the coast of Malta, such as at Mellieha Bay: William Burridge, *Seeking the Site of Saint Paul's Shipwreck* (Valletta, 1952). Musgrave puts the shipwreck site to Salina Bay and supposes that the Roman villa excavated at Burmarrad is the home of Publius: George H. Musgrave, *Friendly Refuge* (Crowborough, Sussex, 1979).

⁷⁶ Acts. 27.40. According to different interpretations of this passage, some think that the anchors were recovered. Bruce, *The Acts of the Apostles*, p. 527. However, it is generally agreed that the anchors were abandoned by cutting the ropes that attached them to the ship: Ernest Haenchen, *The Acts of the Apostles, A Commentary* (Philadelphia, 1971), pp. 707-08.

⁷⁷ Acts. 28.6. Ignorance of these 'barbarous' people is also implied when they believe that Paul must be a God after the anecdote of Paul and the viper: Bruce, *The Acts of the Apostles*, p. 532.

⁷⁸ Traditions that are documented in Maltese historiography from the sixteenth century onwards relate to the conversion of the whole Maltese population to Christianity and to the consecration of Publius, the first citizen of Malta, as the first bishop of the island by the Apostle of the Gentiles, as well as to the uninterrupted continuity of Christianity on these islands: Jean Quintin d'Autun, *The Earliest Description of Malta (Lyons 1536)*, trans. Horatio C. R. Vella (Malta, 1980), pp. 40-47; A. A. Caruana, *Ancient Pottery from the Ancient Pagan Tombs and Christian Cemeteries in the Islands of Malta* (Malta, 1899), pp. 242-56. Abela provides a seventeenth-century version of these beliefs (the facsimile reprint of the manuscript is available as a 1984 reprint): Commendatore Fra. Gian. Francesco Abela, *Della descrizione di Malta isola nel mare Siciliano con le sue antichità, ed altre notizie. Libr. Quattro. 1647*. Facsimile Edition. (Malta, 1984), pp. 221-40.

⁷⁹ Thucydides 7.13 and 7.50.

⁸⁰ Acts 27. 17. About the identification of the wind Εὐροκίδων, as the prevailing wind of the east-northeast direction, see Buhagiar, "The Saint Paul Shipwreck Controversy," p. 184.

⁸¹ Said-Zammit, *Population, Land Use and Settlement*, 44. Other scholars are on agreement that the ship intended to cross to Syracuse directly from Crete: Rizzo, "Malta e la Sicilia," p. 180; Buhagiar, "The Saint Paul Shipwreck Controversy," p. 184.

⁸² This anchor stock was discovered off Qawra point and is now kept at the Museum of Archaeology in Valletta. This is the largest lead anchor stock ever discovered (4.12 m. long). A lead collar that was 84 cm long was also recovered from a location close to the large anchor. *Museum Annual Reports* 1964.

⁸³ Lionel Casson, *Ancient Trade and Society* (Detroit, 1984), pp. 96-116; Lionel Casson, *Ships and Seamanship in the Ancient World* (Princeton, 1971), pp. 297-99.

⁸⁴ It is also likely that Malta was supplied from Sicily, one of the major grain-producing regions in the Mediterranean.

⁸⁵ Honor Frost, *The Mortar Wreck in Mellieha Bay* (London, 1969), p. 2.

⁸⁶ Frost, *The Mortar Wreck*, pp. 11-13 and 28.

⁸⁷ Bonanno, *Roman Malta*, p. 16.

⁸⁸ T. S. Brown, "Byzantine Malta: A Discussion of the Sources," in *Medieval Malta: Studies on Malta Before the Knights*, ed. Anthony Luttrell (London, 1975), pp. 71-73.

Notes to Chapter VI

¹ CIL X. 7459, 7501, 7502, 7503, 7504, 7505, 7506, 7507, 7508, 7509, 8318; IG XIV, 601; Mario Buhagiar, "Malte dans l'antiquité tardive et à l'époque Byzantine," *Les dossiers d'archéologie* 267 (2001), 69.

² Ian Friel, "Byzantium and the sea: Byzantine fleets and the history of the empire in the age of the Macedonian emperors, c. 900-1025 CE," in *War at Sea in the Middle Ages and the Renaissance*, ed. John B. Hattendorf and Richard W. Unger (New York, 2003).

³ Frank M. Clover, "Cathage and the Vandals," in *The Late Roman West and the Vandals* (Norfolk, 1993), pp. 1-22.

⁴ Clover, "Carthage and the Vandals," p. 1-22.

⁵ T. S. Brown, "Byzantine Malta: A Discussion of the Sources," in *Medieval Malta: Studies on Malta Before the Knights*, ed. Anthony T. Luttrell (London, 1975), pp. 71-73; Anthony T. Luttrell, "Approaches to Medieval Malta," in *Medieval Malta. Studies on Malta before the Knights*, ed. Anthony T. Luttrell (London, 1975), p. 21.

⁶ Victor, Saint Bishop of Vita, *Historia persecutionis africanae provinciae sub Geiserico et Hunrico regibus Wandalorum*, ed. Karl Halm, 2 vols. (Berolini, 1879), 1:13-14. The passage related to Malta is also quoted in Brown, "Byzantine Malta," p. 71. Buhagiar mentions that based on the stylistic similarities in the architecture of some of the tombs, it is possible to see evidence of cultural influences from Africa: Buhagiar, "Malte dans l'antiquité tardive," p. 69.

⁷ This period is simplified here to provide a general outline to view the developments in Malta in a historical context. For discussions regarding the struggle between the Vandals and the Byzantines, see the papers in *Byzantium and the Barbarians in Late Antiquity* (Washington, D.C., 1985); E. A. Thompson, *Romans and Barbarians: The Decline of the Western Empire* (Madison, 1982).

⁸ Procopius, *Bellum Vandalicum*, 3.14.16. Procopius mentions in this short passage that Malta and Gozo mark the boundary between the Adriatic and Tuscan Seas.

⁹ Procopius, *Bellum Gothicum*, 2.24.28.

¹⁰ Brown, "Byzantine Malta," p. 73.

¹¹ The majority of Christian inscriptions are either in Greek or bear Greek names: Buhagiar, "Malte dans l'antiquité tardive," p. 71.

¹² Buhagiar, "Malte dans l'antiquité tardive," p. 71.

¹³ Procopius, *Bellum Gothicum*, 7.40.17.

¹⁴ The coastline between Italy and southern Spain was still in Germanic hands but Byzantium controlled the seas in this area by occupying the Balearics, Corsica and Sardinia.

¹⁵ Brown, "Byzantine Malta," pp. 75-76. Based on a later document (dated 592) the African church owned property on Malta. The document is Gregory the Great, *Registrum*, 2. 43. This means that Malta has been part of this church at some point and, accordingly, it is possible that Malta was incorporated to the African church at some point. For more information about the possible African connection and archaeological evidence that may be interpreted as such, see Buhagiar, "Malte dans l'antiquité tardive," pp. 69-71.

¹⁶ Brown's extensive research concluded that no bishop of Malta was mentioned in the lists and the councils of the period. However, the absence of certain known bishops of Sicily in these documents suggests that the bishops of Sicily and Malta may have been omitted in such documents for some reason: Brown, "Byzantine Malta," p. 72.

¹⁷ These three letters were studied by E. Coleiro "Tre lettere di S. Gregorio Magno," *Missione* (1965), 17-21; a summary of his conclusions is provided in Brown, "Byzantine Malta," p. 75.

¹⁸ Except for a small section in southern France that was still under the control of the Franks who had no naval power: Hélène Ahrweiler, *Byzance et la mer. La marine de guerre, la politique et les institutions maritimes de Byzance aux VIIe-XVe siècles* (Paris, 1966), p. 7.

¹⁹ Ahrweiler, *Byzance et la mer*, pp. 389-90.

²⁰ Hélène Ahrweiler, "Les ports Byzantins (VIIe-IXe siècles)," in *La Navigazione Mediterranea nell'alto medioevo*, Settimane di Studio del centro Italiano di studi sull'alto medioevo 25 (Spoleto, 1978), 1: 285-87.

²¹ Lewis points to the fact that increased piracy generally reflects increased shipping, since in the absence valuable cargoes to seize, piracy disappears as it is no longer profitable: Archibald Lewis, "Mediterranean Maritime Commerce," in *La Navigazione Mediterranea nell'alto medioevo*, Settimane di Studio del centro Italiano di studi sull'alto medioevo 25 (Spoleto, 1978), 2: 482; Ahrweiler, "Les ports Byzantins," 1: 285-87.

²² Exactly who created the *theme* system is a debated issue. Theophanes and Constantine Porphyrogenitus, writing in the ninth and the tenth centuries, respectively, attribute the creation of the *themes* to Heraclius. This would put the date of the creation of this system to a little after 610.

²³ For more information about the defense and navy of the Byzantine Empire, see Hélène Antoniadis-Bibicou, *Études d'histoire maritime de Byzance, à propos du thème des Caravisiens* (Paris, 1966); Georg Ostrogorsky, *History of the Byzantine State* (Oxford, 1956); Walter Emil Kaegi, *Army, Society, and Religion in Byzantium* (London, 1982).

²⁴ It is possible that some of the funerary sites at the Late Roman funerary hypogea were active until the seventh century and a small ceramic scatter that might date to the Byzantine period was

discovered at San Pawl Milqi: Alessandra Molinari and Nathaniel Cutajar, "Of Greeks and Arabs and of Feudal Knights," *Malta Archaeological Review* 3 (1999), 10.

²⁵ Molinari and Cutajar, "Of Greeks and Arabs," p. 10.

²⁶ Reuben Grima, "Rescue Excavation of Late Antiquity Deposit Lying in the Seabed within Marsaskala Bay," *Museum Annual Reports* (1994). The archaeological deposit was only partly excavated in collaboration with D.R.A.S.S.M. The total excavation area was 24 m², and the general layout of the site definitely points to harbor debris, or the dumpsite for a possible settlement on land in this bay.

²⁷ The site was inspected by a team under the author's direction in 2000, and found to be completely covered with poseidonia. For more information see, Ayşe D. Atauz and John McManamon, "Underwater Survey of Malta: The Reconnaissance Season of 2000," *INA Quarterly* 28:1 (2001), 24-25.

²⁸ Agostino Pertusi, "Le isole Maltesi dall'epoca bizantina al periodo normanno e svevo (secc. VI – XIII) e descrizioni di esse dal sec. XII al sec. XVI," *Byzantinische Forschungen* 5 (1977), 266.

²⁹ Nicephorus, Saint Patriarch of Constantinople, *Short History [starting] after the Reign of Maurice*, trans. Cyril Mango, Dumbarton Oaks Texts 10 (Washington, D.C., 1990), 24.15; Pertusi, "Le isole Maltesi," p. 266.

³⁰ Theophanes, *Chronographia*, ed. Carolus de Boor (Hildesheim, 1963), 469.4-15; Buhagiar, "Malte dans l'antiquité tardive," p. 74; Pertusi, "Le isole Maltesi," p. 266.

³¹ Gustave Léon Schlumberger, "Sceaux byzantins inédits," *Revue des études grecques* 13 (1900), 492 n. 203. The seal was published without any photographs or drawings in 1900 and the description of it included information about it being purchased in Tunisia. Brown tried to find this seal but he was unable to do so after a long search. Therefore, the dating of this seal is not very secure. For a detailed discussion see Brown, "Byzantine Malta," p. 77.

³² Brown, "Byzantine Malta," p. 77.

³³ Ahrweiler, *Byzance et la mer*, pp. 70, 87, 90-91; Joseph Busuttil, "Maltese Harbors in Antiquity," *Melita Historica* 5.4 (1971) p. 307; Buhagiar, "Malte dans l'antiquité tardive," p. 74; Molinari and Cutajar, "Of Greeks and Arabs," p. 11; Pertusi, "Le isole Maltesi," pp. 262, 267.

³⁴ Ahrweiler, *Byzance et la mer*, p. 70.

³⁵ Brown, "Byzantine Malta," p. 77.

³⁶ Brown, "Byzantine Malta," p. 77.

³⁷ The fact that the name of the island was not recorded in the documents, or that its governor was not listed in hierarchical lists supports this view. Brown carried out extensive research in such documents and confirmed the absence of Malta's name. Brown, "Byzantine Malta," p. 78.

³⁸ Lewis, "Mediterranean Maritime Commerce," 2:493; for detailed analysis of this subject, see George Fadlo Hourani, *Arab Seafaring in the Indian Ocean in Ancient and Early Medieval Times* (Princeton, 1995), pp. 51-83.

³⁹ Lewis, "Mediterranean Maritime Commerce," 2:494.

⁴⁰ Ahrweiler, *Byzance et la mer*, pp. 390-91.

⁴¹ Ahrweiler, *Byzance et la mer*, p. 391.

⁴² Ahrweiler, *Byzance et la mer*, p. 392.

⁴³ Lewis, "Mediterranean Maritime Commerce," 2:495.

⁴⁴ Mario Buhagiar, *Late Roman and Byzantine Catacombs and Related Burial Places in the Maltese Islands*, BAR International Series 302 (Oxford, 1986), p. 6.

⁴⁵ Pertusi, "Le isole Maltesi," p. 263.

Notes to Chapter VII

¹ For a detailed discussion of this issue, and a study of the documents that led to the creation of this attitude, see Anthony T. Luttrell, "Girolamo Manduca and Gian Francesco Abela: Tradition and Invention in Maltese Historiography," *Melita Historica* 7.2 (1977), 105-132. See also Wettinger for parallels for such attitudes in other Mediterranean countries Godfrey Wettinger, "The Arabs in Malta," in *Malta: Studies of Its Heritage and History* (Malta, 1986), p. 87.

² The facsimile reprint of the manuscript is available: Commendatore Fra. Gian. Francesco Abela, *Della descrizione di Malta isola nel mare Siciliano con le sue antichità, ed altre notizie* (1647; repr. Malta, 1984).

³ Although the Knights of Saint John did not permit the locals to become knights, some Maltese served within their clergy: Goodwin, *Malta*, p. 23.

⁴ Luttrell, "Approaches to Medieval Malta," p. 2; Goodwin, *Malta*, p. 23.

⁵ Joannes Georgius Graevius, *Thesaurus antiquitatum et historiarum Siciliae* (Lugdun Batavorum, 1723); Giovanni Antonio Ciantar, *Malta Illustrata: ovvero Descrizione di Malta*

isola del mare Siciliano e Adriatico, con le sue antichit', ed altre notizie, divisa in quattro libri (Malta, 1772).

⁶ In Wettinger's words: "Towards the end of the eighteenth century the notorious Abate Vella published a long series of spurious documents concerning Sicily as well as Malta during the Muslim Period, an enterprise which deservedly cost him several years of imprisonment but which has confused generations of historians." Godfrey Wettinger, "The Archives of Palermo and Maltese Medieval History: A first Report," *Proceedings of History Week* (1983), 60.

⁷ There is no useful evidence in Greek; and the Hebrew sources have so far proved disappointing. For an overview of the translated texts (in French) see Redjala, "L'archipel Maltais," pp. 203-08.

⁸ Michele Amari, ed., "Athar al-bilad wa-akhbar al-'ibad (Monument of Places and History of God's Bondsmen) [written by] al-Qazwini," *Bibliotheca Arabo-Sicula*, 2 vols. (Torino and Rome, 1880), 1: 240-41. Qazwini served as legal expert and judge (*qadi*) in several different localities in Persia and Iraq and traveled in Mesopotamia, Syria, and Iraq finally entering the circle patronized by the governor of Baghdad, 'Ata-Malik Juwayni. He dedicated his Arabic-language cosmography titled '*Aja'ib al-makhlukat wa-ghara'ib al-mawjudat* ('Marvels of Things Created and Miraculous Aspects of Things Existing') written in the late 1280s.

⁹ The longest distance in Malta from southeast to northwest is about 27 km and, at its widest point in an east-west direction, measures 14.5 km. For the Arabic text see Michele Amari, ed., "Nuhbat ad-dahr fi 'aga'ib al-barr wa-l-bahr (Manual of cosmography) [written by] ad-Dimasqi," *Bibliotheca Arabo-Sicula*, 2 vols. (Torino and Rome, 1880), 1: 247. Dimasqi, died in 1327.

¹⁰ Michele Amari, ed., "*Masalik al-absar fi mamalik al-amsar* (Sentiers à parcourir des yeux in the kingdoms of grand capitals), [written by] al-'Umari," *Bibliotheca Arabo-Sicula*, 2 vols. (Torino and Rome, 1880), 1: 253-54. Umari wrote in the fourteenth century.

¹¹ They are generally too short to provide information through philological studies: Luttrell, "Approaches to Medieval Malta," p. 26.

¹² An account of accidental discovery of a hoard and the documents related to the lawsuit that followed appears among a stash of court documents dating to 1458/9. Similar lawsuits dating to 1461 and 1526 were also recorded. Another case recorded in a document titled *de inventione thesauri* describes a legal action against a goldsmith who purchased a hoard of late Roman coins: Luttrell, "Approaches to Medieval Malta," p. 11.

¹³ Most of the artifact records were lost or displaced during the Second World War, when the Museum collections were moved several times to survive the bombings.

¹⁴ The finds are tentatively dated to the medieval period but the ongoing study of this material by the staff of the National Museum of Malta may change these dates.

¹⁵ Luttrell, "Approaches to Medieval Malta," p. 12.

¹⁶ Claude Cahen, "Commercial Relations Between the Near East and Western Europe from the VIIth to the XIth Century," in *Islam and the Medieval West*, ed. Khalil Semaan, (New York, 1980), pp. 1-26.

¹⁷ Cahen, "Commercial Relations," p. 5.

¹⁸ Archibald Lewis, "Mediterranean Maritime Commerce," in *La navigazione mediterranea nell'alto medioevo*, 2 vols. (Spoleto, 1978), 2:496.

¹⁹ Lewis, "Mediterranean Maritime Commerce," 2:496-97.

²⁰ For a list of pirate attacks on ports and other incidents of piracy in this period and the relevant sources see Cahen, "Commercial Relations," p. 6.

²¹ Armand O. Citarella "Patterns of Medieval Trade, the Commerce of Amalfi Before the Crusade," *Journal of Economic History* 28:4 (1968), 531-555; reprinted in *Speculum* 42:2 (1967), 299-312; Lewis, "Mediterranean Maritime Commerce," 2:498-99.

²² Cahen, "Commercial Relations," p. 17.

²³ Cahen, "Commercial Relations," p. 17.

²⁴ Jamil M. Abun-Nasr, *A History of the Maghrib in the Islamic Period* (Cambridge, 1987), p. 28. According to Muslim historian En Noweiri, the conquest of North Africa took place in 647-8 and was conducted by Abd Allah ibn Abbas, who was appointed as the general of the Muslim forces (to conquer Africa) by the caliph Othman himself. For a very detailed account of this expedition see Appendix 2 including the translation of this text in Ibn Khaldun, *Histoire des Berbères et des dynasties Musulmanes de l'Afrique septentrionale*, trans. Le Baron de Slane, 2 vols. (Paris, 1925), 1:314.

²⁵ Stefan Goodwin, *Malta, Mediterranean Bridge* (Westport, Conn., 2002), p. 14.

²⁶ The seal found in Malta belongs to Nicetas *droungarios* and *archon* of Malta. According to Brown's research based on parallels from other Mediterranean contexts, it is possible that a naval squadron, which was under direct imperial control (as opposed to themal) was positioned in Malta. The second seal from Gozo might have belonged to the same person or a separate officer appointed to Gozo. T. S. Brown, "Byzantine Malta: a Discussion of the Sources," in *Medieval Malta. Studies on Malta before the Knights*, ed. Anthony Luttrell (London, 1975), pp. 76, 87.

²⁷ Goodwin, *Malta*, p. 14.

²⁸ En Noweiri mentions that the first Muslim forces to attack Carthage were under the command of Abd Allah ibn Sad. See Ibn Khaldun, *Histoire des Berbères*, pp. 316-27.

²⁹ The name of this city can be in different forms, possible versions are: Cairouan, Kairouan, Kayrawan, Cairwan, etc.

³⁰ Ahmad Aziz, *A History of Islamic Sicily* (Edinburgh, 1975), p. 3.

³¹ E. W. Bovill, *The Golden Trade of the Moors* (London, 1968), p. 57.

³² Once Arab control of the eastern borders of *Maghrib* was consolidated (ca. 705), a separate *wilaya* of Ifriqiya was created with its capital at Kairwan. The governor of the *wilaya* of Ifriqiya carried the title of *amir* or *wali*. As representative of the caliph, the *amir* had extensive powers: he was the governor, commander of troops, and head of the religious community: Abun-Nasr, *A History of the Maghrib*, pp. 32-33.

³³ The majority of the Arabs ruling Ifriqiya descended from families who had been established in *Maghrib* for several generations and had acquired wealth and influence. These families, especially the Fihrids and the Muhallabs, played an important role in the conquest of the *Maghrib*, and the *jund* (the regular troops) of the *wilaya* were traditionally recruited from amongst them. In all, authority in Ifriqiya was under the control of these old families, and they were becoming more and more reluctant to obey the governors sent from Baghdad: Abun-Nasr, *A History of the Maghrib*, p. 53.

³⁴ Abun-Nasr, *A History of the Maghrib*, p. 53.

³⁵ Abun-Nasr, *A History of the Maghrib*, p. 53.

³⁶ Their official title was *amir*, which, unlike the title *wali*, did not imply subordination to the central administration of the caliphate: Abun-Nasr, *A History of the Maghrib*, p. 53.

³⁷ Abun-Nasr, *A History of the Maghrib*, p. 54.

³⁸ There were two major attacks in 740 and 753 on Sicily and most of Corsica was taken between 784 and 810. Muslims had occupied large parts of Sardinia, especially in the region of Cagliari, Porto Torres and Olbia by 827. They began their occupation of Crete in 824: Goodwin, *Malta*, p. 16. En Noweiri dates Muslim conquest of Sicily to 836, still mentioning Asad bin-al-Furat as the *qadi* who led the Muslim forces: Ibn Khaldun, *Histoire des Berbères*, p. 412.

³⁹ Mbarek Redjala, "L'archipel Maltais dans la littérature historico-géographique d'expression arabe à l'époque médiévale," in *Proceedings of the First Congress on Mediterranean Studies of Arabo-Berber Influence*, ed. Micheline Galley and David R. Marshall (Algiers, 1973), pp. 204-05. Ibn Khaldun also mentions that Malta was among the islands that the Muslims captured from the Byzantines. See Michele Amari, ed., "*Kitab al-I'bar* [written by] 'Ibn Khaldun,'" *Bibliotheca Arabo-Sicula*, 2 vols. (Torino and Rome, 1880), 2: 164-65.

⁴⁰ Şehabeddin Tekindağ, "Malta," *İslam Ansiklopedisi* (İstanbul, 1993), p. 260.

⁴¹ Ibn al-Athir mentions that the fleet was sent against the “islands adjacent to Sicily” and from the context, it is understood that these islands are to the south of Sicily. Michele Amari, ed., “*al-Kâmil fî at-tarikh* (The Complete History) [written by] ‘Ibn ‘al ‘Athir,” *Bibliotheca Arabo-Sicula*, 2 vols. (Torino and Rome, 1880), 1: 371.

⁴² Abun-Nasr, *A History of the Maghrib*, p. 58.

⁴³ Aziz, *A History of Islamic Sicily*, p. 17.

⁴⁴ Michele Amari, ed., “*al-Kâmil fî at-tarikh* (The Complete History),” 1:371; Tekindağ, “Malta,” p. 260; Luttrell, “Approaches to Medieval Malta,” p. 25.

⁴⁵ Goodwin, *Malta*, p. 17; Brown, “Byzantine Malta,” p. 78.

⁴⁶ Brown, “Byzantine Malta,” pp. 82-83.

⁴⁷ Agostino Pertusi, “Le isole Maltesi dall’epoca bizantina al periodo normanno e svevo (secc. VI – XIII) e descrizioni di esse dal sec. XII al sec. XVI,” *Byzantinische Forschungen* 5 (1977), 275.

⁴⁸ Pertusi, “Le isole Maltesi dall’epoca bizantina,” p. 275.

⁴⁹ Michele Amari and Carlo Alfonso Nallino, *Storia dei Musulmani di Sicilia*. 3 vols. (Catania, 1933), 1: 490.

⁵⁰ Pierre Marie Louis de Boissgelin de Kerdu, *Ancient and Modern Malta*. 2 vols. (London, 1805), 1:10.

⁵¹ Salvatore Candido, *Contributi alla storia di Malta dall’età araba: in un carteggio inedito di Michele Amari con Francesco Crispi (1853-1854)* (Rome, 1988), p. 138.

⁵² An Italian translation of the text was published in Michele Amari, ed., “*Kitab al-I’bar*,” 2:178; For a French translation from the original Arabic text see Redjala, “L’archipel Maltais,” p. 204. The original of Ibn Khaldun was written in the late fourteenth or early fifteenth century.

⁵³ Michele Amari, ed., “Cronica di Cambridge,” *Bibliotheca Arabo-Sicula*, 2 vols. (Torino and Rome, 1880), 1: 279.

⁵⁴ James Kendal, “Malta,” in *Catholic Encyclopedia* (New York, 1910), 9:574-576; Luttrell, “Approaches to Medieval Malta,” p. 27; Brown notes that the name of the bishop of Malta does not appear in any of the council’s acts and therefore he may have never existed. Brown, “Byzantine Malta,” p. 78.

⁵⁵ Abela, *Della descrizione di Malta*.

⁵⁶ Tekindağ, “Malta,” p. 261.

⁵⁷ Michele Amari, ed., “Nihayat ‘al ‘arib [written by] ‘an Nuwayri,” *Bibliotheca Arabo-Sicula*, 2 vols. (Torino and Rome, 1880), 2: 147.

⁵⁸ Michele Amari, ed., “*al-Kâmil fi at-tarikh* (The Complete History),” 1:387.

⁵⁹ Redjala, “L’archipel Maltais,” p. 205.

⁶⁰ Brincat, *Malta 870-1054*, p. 11.

⁶¹ Brincat, *Malta 870-1054*, p. 11.

⁶² On the other hand, evidence of widespread destruction that is generally attributed to the Arab attacks is seen in archaeological sites such as San Pawl Milqi and Tas-Silg: Mario Buhagiar, “Malte dans l’Antiquité tardive et à l’époque Byzantine,” *Les dossiers d’archéologie* 267 (2001) p. 74. See also *Museum Annual Reports* 1964, p. 151, 183; *Museum Annual Reports* 1965, p.162; *Museum Annual Reports* 1966, p. 120; *Museum Annual Reports* 1968, p. 134; *Museum Annual Reports* 1970, pp. 99-100.

⁶³ Nathaniel Cutajar, “Arabes et Normands à Malte,” *Les dossiers d’archéologie* 267 (2001), 77-79.

⁶⁴ Goodwin, *Malta*, p. 18.

⁶⁵ Negroes are the black, Arab-speaking Muslims from Africa: Aziz, *A History of Islamic Sicily*, pp. 21-22,

⁶⁶ Goodwin, *Malta*, p. 20.

⁶⁷ Goodwin, *Malta*, p. 20.

⁶⁸ Wettinger, “The Arabs in Malta,” pp. 94-95.

⁶⁹ It has been suggested that the language and the place-names were quickly altered into Arabic forms because the inhabitants already spoke a Semitic language derived from Phoenician. However, in that case one would expect to find the traces of this old Phoenician language preserved in the Maltese language, and there is no philological evidence that any traces of Punic remain in modern Maltese. For a discussion of this topic see Wettinger, “The Arabs in Malta,” p. 95 and also Brian Blouet, *The Story of Malta* (Malta, 1993), p. 37.

⁷⁰ Presumably the Arabs introduced into the region the *noria* (Maltese *senija*), an animal powered device for drawing water from wells. See Blouet, *The Story of Malta*, p. 37.

⁷¹ Blouet, *The Story of Malta*, p. 37.

⁷² Cutajar, "Arabes et Normands," p. 78.

⁷³ Wettinger, "The Arabs in Malta," p. 88.

⁷⁴ Goodwin, *Malta*, p. 21.

⁷⁵ In addition, al-Qazwini mentions in the same account that Malta was near Andalusia. Therefore, it is possible that he had mistaken an island close to Andalusia for Malta. See Blouet, *The Story of Malta*, p. 37; for the text see Redjala, "L'archipel Maltais," p. 204.

⁷⁶ In reality, Malta is about 240 kilometers (150 miles) to Pantelleria, and 93 kilometers (58 miles) to Sicily. For Idrisi's descriptions see Michele Amari, ed., "*Nuzhat al-Mushtaq fi Ikhtiraq al-Afaq* (The delight of him who desires to journey through the climates)," *Bibliotheca Arabo-Sicula*, 2 vols. (Torino and Rome, 1880), 1:45, 53-54, 75. Abu Abdallah Muhammad Ibn Muhammad Ibn Abdallah Ibn Idris al-Qurtubi al-Hasani, was born in Ceuta in 1099 A.D. He was educated in Cordova. Later he travelled far and wide in connection with his studies and then flourished at the Norman court in Palermo. The date of his death is controversial, being either 1166 or 1180 A.D.

⁷⁷ Blouet, *The Story of Malta*, p. 38.

⁷⁸ Harold Alfred MacMichael, *A History of the Arabs in the Sudan and Some Account of the People Who Preceded them and of the Tribes Inhabiting Dartur* (New York, 1967), pp. 146, 169, 173; Goodwin, *Malta*, p. 22.

⁷⁹ Luttrell, "Approaches to Medieval Malta," p. 26.

⁸⁰ Brincat, *Malta 870-1054*, p. 12. Another detailed discussion of this text can be found in Pertusi, "Le isole Maltesi dall'epoca bizantina," pp. 277-79.

⁸¹ Luttrell, "Approaches to Medieval Malta," p. 26; Redjala, "L'archipel Maltais," p. 205.

⁸² Anthony T. Luttrell, "Slaves and Captives on Malta: 1053/4 and 1091," in *The Making of Christian Malta: From the Early Middle Ages to 1530*, Variorum Collected Studies Series CS 722 (Aldershot, 2002), p. 100.

⁸³ Luttrell, "Slaves and Captives on Malta," p. 101. Wettinger also agrees that the slaves in question were already Islamicized and Arabized inhabitants. Wettinger, "The Arabs in Malta," p. 91.

⁸⁴ Luttrell, "Approaches to Medieval Malta," p. 26.

⁸⁵ Or in 1090 according to some sources such as Blouet, *The Story of Malta*, p. 38.

⁸⁶ Pertusi, "Le isole Maltesi dall'epoca bizantina," p. 279.

- ⁸⁷ Luttrell, "Slaves and Captives on Malta," p. 102.
- ⁸⁸ Gaufredo Malaterra, *De rebus gestis Roberti Giuscardi, Ducis Calabriae et Rogerii, Comitis Siciliae*, ed. Ernesto Pontieri, *Rerum Italicarum Scriptores* 5 (Bologna, 1927-1928), pp. 94-96.
- ⁸⁹ Luttrell, "Slaves and Captives on Malta," p. 103.
- ⁹⁰ Luttrell, "Slaves and Captives on Malta," p. 104.
- ⁹¹ Goodwin, *Malta*, p. 23.
- ⁹² Luttrell, "Approaches to Medieval Malta," p. 30.
- ⁹³ Luttrell, "Approaches to Medieval Malta," p. 33.
- ⁹⁴ Luttrell, "Approaches to Medieval Malta," p. 29.
- ⁹⁵ Aziz, *A History of Islamic Sicily*, p. 54; Jeremy Johns, "Malik Ifriqiya: The Norman Kingdom of Africa and the Fatimids," *Libyan Studies* 29 (1998), 89-96.
- ⁹⁶ Goodwin, *Malta*, p. 24.
- ⁹⁷ Goodwin, *Malta*, p. 24.
- ⁹⁸ According to Ibn el Athir, Roger II's fleet consisted of 150 galleys in the 1140's, a decade during which most of the cities of North Africa were conquered. Appendix E in the second volume includes a translation of Ibn el Athir's text in Ibn Khaldun, *Histoire des Berbères*, 2: 582.
- ⁹⁹ Bovill, *The Golden Trade of the Moors*, pp. 61, 81-82.
- ¹⁰⁰ Goodwin, *Malta*, p. 25.
- ¹⁰¹ Luttrell, "Approaches to Medieval Malta," p. 31; Goodwin, *Malta*, p. 25.
- ¹⁰² Many twelfth century Muslim cemeteries were discovered, especially around Rabat, including the "Maimuna tombstone" from Gozo that dates to 1174: Wettinger, "The Arabs in Malta," p. 94.
- ¹⁰³ Wettinger, "The Arabs in Malta," p. 93; Blouet, *The Story of Malta*, p. 43; Luttrell, "Approaches to Medieval Malta," p. 32.
- ¹⁰⁴ Anthony Luttrell, "Medieval Malta: The Non-Written and the Written Evidence," in *Malta. A Case Study in International Cross-Currents*, ed. Stanley Fiorini and Victor Mallia-Milanes,

Proceedings of the First International Colloquium on the History of the Central Mediterranean (Malta, 1991), p. 37.

¹⁰⁵ Michele Amari, ed., “*Kitab al-I'bar*,” 2:212-213; Redjala, “L’archipel Maltais,” p. 206.

¹⁰⁶ The official report on Malta and Gozo made in about 1241 survives only in the form of a letter from Fredrick II to Giliberto Abbate, his governor in Malta, in which the emperor’s chancery recapitulated information sent by Giliberto. Luttrell compiled his studies of this document in several publications: Anthony Luttrell, “Giliberto Abbate’s Report on Malta: Circa 1241,” *Proceedings of History Week* (1993), 1-29; also published as “Giliberto Abbate’s Report on Malta: Circa 1241,” in *The Making of Christian Malta: From the Early Middle Ages to 1530*. Variorum Collected Studies Series CS722 (Aldershot 2002), pp. 1-29.

¹⁰⁷ Luttrell, “Approaches to Medieval Malta,” pp. 38-39. Wettinger also accepts that this low number might be due to a mistake but he points to the fact that this count only includes the families living on the royal estates and not on the whole island: Wettinger, “The Arabs in Malta,” pp. 98-99.

¹⁰⁸ This is also a very important document that provides information about the period of re-establishment of Christianity in Malta. This is a poorly researched subject since the general belief was that the Christians on Malta survived the Arab rule. For an interesting discussion see Anthony Luttrell, “Medieval Malta: The Non-Written and the Written Evidence,” p. 37.

¹⁰⁹ The decree itself did not survive but based on the practice that followed it seems clear that it did not target the Moors or the Arabs, but the Muslims: Wettinger, “The Arabs in Malta,” p. 99.

¹¹⁰ Jean Quintin d'Autun, *The Earliest Description of Malta (Lyons 1536)*, trans. Horatio C. R. Vella (Malta, 1980), p. 31.

¹¹¹ Wettinger, “The Arabs in Malta,” pp. 95-96.

¹¹² Redjala, “L’archipel Maltais,” p. 207.

¹¹³ Redjala, “L’archipel Maltais,” p. 207; Brown, “Byzantine Malta,” p. 82, note 98.

Notes to Chapter VIII

¹ David Abulafia, “Henry Count of Malta and his Mediterranean Activities: 1203-1230,” in *Medieval Malta. Studies on Malta before the Knights*, ed. Anthony T. Luttrell (London, 1975), pp. 104-126. The article reflects some of the ideas discussed in the present manuscript, but because the focus is different they have not been developed.

² Blouet, *The Story of Malta*, pp. 36-46.

³ Anthony T. Luttrell, "Approaches to Medieval Malta," in *Medieval Malta. Studies on Malta before the Knights*, ed. Anthony T. Luttrell (London, 1975), pp. 1-71.

⁴ Godfrey Wettinger, "The *Castrum Maris* and its Suburb Birgu during the Middle Ages," in *Birgu: A Maltese Maritime City*, ed. Lino Bugeja, Mario Buhagiar and Stanley Fiorini (Malta, 1993), pp. 31-73.

⁵ Stefan Goodwin, *Malta, Mediterranean Bridge* (Westport Conn., 2002).

⁶ Total surface area of Malta is 316 sq km and the population of Malta is estimated to be around 10,000 people in the early Medieval period and increased to 20,000 in the late Medieval period. Malta's population density is quite high when compared to the other Mediterranean islands: Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II*, 2 vols. (New York 1972), 1:150. Cultivated parts of the island comprise 40 percent of the total surface area and only five percent of the cultivated area is irrigated: James M. Houston, *The Western Mediterranean World: An Introduction to its Regional Landscapes* (London, 1964), p. 641.

⁷ Almohads made the Hafids autonomous in Ifriqiya in the year 1207, bringing peace and stability to the area. This period of relative importance for the central Mediterranean ports and trade ends in 1237, when Egypt granted trading concessions to the Italians, changing the trade patterns and restoring the trade routes towards the eastern Mediterranean: Goodwin, *Malta*, p. 27.

⁸ John Wright, *Libya* (London, 1969) p. 86.

⁹ Archibald Lewis, "Mediterranean Maritime Commerce," in *La navigazione mediterranea nell'alto medioevo*, 2 vols. (Spoleto, 1978), 2: 501.

¹⁰ Both Luttrell and Mallia-Milanes mention that Malta "... lay outside the trade route normally followed by Venetians proceeding to Spain, North Africa, or the Atlantic." Luttrell, "Approaches to Medieval Malta," pp. 42, 46; Anthony Luttrell, "Venetians at Medieval Malta," *Melita Historica* 2.1 (1960), 74-80; Victor Mallia-Milanes, *Venice and Hospitaller Malta 1530-1798* (Malta, 1992), p. 10.

¹¹ Henri Bresc, "Sicile, Malte et Monde Musulman," in *Malta. A Case Study in International Cross Currents*, ed. Stanley Fiorini and Victor Mallia-Milanes (Malta, 1991) p. 56.

¹² Bacchisio Raimondo Motzo ed., *Il compasso da navigare* (Cagliari, 1947), p. 111.

¹³ Francesco Pegolotti was the agent of the great banking house of the Bardi in Florence. In 1340, he wrote a manual for merchants traveling to China. For a discussion of the dating of the manuscript, see page xiv; for the sections that include the name of Malta in association with cotton production and trade, see pages 293 and 367: Francesco Balducci Pegolotti, *La Pratica della Mercatura*, ed. Allan Evans (Cambridge, Mass., 1936).

¹⁴ See Chapter VII for the introduction of the cotton and cumin agriculture to Malta.

¹⁵ David Abulafia, "Southern Italy, Sicily and Sardinia in the Medieval Mediterranean Economy," in *Commerce and Conquest in the Mediterranean 1100-1500* (Norfolk 1993), p. 31.

¹⁶ The cotton producing areas are ranked as follows (from the highest quality to the lowest): Amman (Syria), Aleppo (Syria), Armenia, Damascus (Syria), Acres, Cyprus, Leccia (Syria), Basilicata (Puglia, southern Italy), Malta, Calabria (southern Italy), and finally Sicily. Pegolotti, *La Pratica della Mercatura*, pp. 366-67.

¹⁷ Blouet, *The Story of Malta*, p. 41.

¹⁸ There are many anthropological and sociological models that could be applied to the relation between the change in agricultural patterns and the movement of population to the suburb of the castle. This issue will not be discussed in detail here, but for a review of such models applied to medieval history and the one adopted here, see Adriaan Verhulst, "Medieval Socio-Economic Historiography in Western Europe: Towards an Integrated Approach" *Journal of Medieval History* 23 (1997), pp. 89-101.

¹⁹ Mallia-Milanes mentions that "piracy was one quick way of getting rich" for the inhabitants of small islands like Malta. Mallia-Milanes, *Venice and Hospitaller Malta*, p. 11.

²⁰ Bresc, "Sicile, Malte et Monde Musulman," p. 48.

²¹ Bresc explains that ruling Malta alone would not be enough to control the central Mediterranean, but both the rulers of Tunisia and the rulers of Sicily ultimately wished to have a hold over all the small islands in this area and the coast opposite to theirs to establish their control over the East-West traffic. For a detailed discussion of this subject see, Bresc, "Sicile, Malte et Monde Musulman," p. 48.

²² Heinrich VI (1165-1197), also known as Henry VI, succeeded his father, Frederick Barbarossa (also known as Friedrich I), in 1190. His marriage to Constance of Sicily gave him a claim to her kingdom, but Henry had to use force to secure his claim after the death of William II in 1189. From 1194, then, Sicily passed into the hands of the Hohenstaufen and became part of the Holy Roman Empire. Henry was assisted by the navies of Genoa and Pisa during his 1194 expedition to secure the Sicilian crown.

²³ Crete was under direct Genoese control for a short time roughly between 1206-1210 until it was lost to Venice: Abulafia, "Henry Count of Malta," p. 105.

²⁴ The oldest surviving Genoese notarial cartulary of Giovanni Scriba, contains an inventory of the possessions of the late Giovanni Scarsaria drawn up in June 1164 that mentions Maltese cotton. The original document is in Mario Chiaudano and Mattia Moresco ed., *Il Cartolare di Giovanni Scriba*, 2 vols. (Turin 1935), 2:204 § 1212.

²⁵ What rights Margarito had on the island and whether he even went there is not clear, but the alienation of Malta from the royal domain by granting it out to non-Maltese Count, although initiated by the last Norman ruler of Sicily, was a post Norman phenomenon: Fredric L. Cheyette "The Sovereign and the Pirates, 1332," *Speculum* 45 (1970), 40-68.

²⁶ To the Venetians Henry was above all a pirate. The name "pescatore" appears to have been a Venetian label, referred to Henry's tendency to fish for other ships' merchandise, or their crew: Abulafia, "Henry Count of Malta," p. 104.

²⁷ It is likely, therefore, that the title "Count of Malta" came with the appointment as Admiral.

²⁸ Abulafia, "Henry Count of Malta," p. 104.

²⁹ Goodwin, *Malta*, p. 27.

³⁰ Like the Italian merchants, the Military Orders acquired wealth due to the banking techniques they developed to transfer pilgrim and crusader funds.

³¹ David Abulafia, "Kantorowicz and Frederick II," in *Italy, Sicily and the Mediterranean 1100-1400* (London 1987), p. 205.

³² Abulafia "Kantorowicz and Frederick," p. 205.

³³ Cheyette "The Sovereign and the Pirates," p. 51.

³⁴ Abulafia, "Henry Count of Malta," p. 124. In this period an efficient Sicilian administration controlled Malta and exploited the royal domain: the *castellan* commanded a garrison of 150 *servientes*, and an armed *sagittia*, for naval defense and for the provisioning the *Castrum Maris*. Luttrell, "Approaches to Medieval Malta," pp. 40-41. *Castellan* is the title of the commander of the soldiers garrisoning the *Castrum Maris*. There were two other officials: *secreto*, in charge of paying the salaries and collection of taxes (financial affairs), and the town mayor of Mdina. These three major officers came from the three or four leading families of Malta and the evidence of their disputes is documented at the archives of Palermo: Godfrey Wettinger, "The Archives of Palermo and Maltese Medieval History: A first Report," *Proceedings of History Week* (1983), 64.

³⁵ For the exact prices mentioned in the accounts between 1273 and 1437: Bresc, "Sicile, Malte et monde musulman," p. 64.

³⁶ Blouet, *The Story of Malta*, p. 39. The official report on Malta and Gozo made in about 1241 survives only in the form of a letter from Frederick II to Giliberto Abbate, his governor in Malta, in which the emperor's chancery recapitulated information sent to him by Giliberto: Anthony T. Luttrell, "Giliberto Abbate's Report on Malta: Circa 1241," *The Making of Christian Malta: From the Early Middle Ages to 1530*, Variorum Collected Studies Series CS722 (Aldershot, 2002), pp. 1-29.

³⁷ There are a few fragments that may be of Provencal or Eastern Mediterranean origin: Nathaniel Cutajar, "Arabes et Normands à Malte," *Les dossiers d'archéologie* 267 (2001), 81.

³⁸ Goodwin, *Malta*, p. 28.

³⁹ The volume of goods handled by Genoese merchants doubled between 1214 and 1274 and quadrupled in the next nineteen years, reaching their maximum value in 1293. The Genoese assured their trade to the east by an agreement with the Sultan of Egypt in ca. 1300: Geoffrey V. Scammell, *The World Encompassed. The First European Maritime Empires c. 800-1650* (New York, 1981), p. 161.

⁴⁰ Jean Dunbabin, *Charles I of Anjou. Power, Kingship and State-Making in Thirteenth-Century Europe* (London, 1998), p. 174; Goodwin, *Malta*, p. 30.

⁴¹ V. Laurenza, "Malta nei documenti angioini del regio archivio di Napoli," *Archivio Storico di Malta* 8.1 (Rome, 1936-7), docs. 28-34, in Wettinger, "The *Castrum Maris*," p. 34.

⁴² Two other Genoese vessels managed to avoid seizure. The Angevin authorities expressed their concerns to the *castellan* who they thought was not careful and cautious enough. Laurenza, "Malta nei documenti angioini," doc. 27, in Wettinger, "The *Castrum Maris*," p. 35.

⁴³ On 20 March 1273 Ada Morier, the viceroy of Sicily, was told to send 50 Angevin men to the Maltese Islands for the garrisons of the islands' castles. He was also directed to send the "galleon" belonging to the nephew of Olivero di Termulo so that the sailors could man the royal galley at Malta and sail her back to Sicily to be handed over to the officials to be repaired: Laurenza, "Malta nei documenti angioini," doc. 32, in Wettinger, "The *Castrum Maris*," p. 35.

⁴⁴ Laurenza, "Malta nei documenti angioini," doc. 39, in Wettinger, "The *Castrum Maris*," p. 35

⁴⁵ Bresc, "Sicile, Malte et Monde Musulman," p. 62.

⁴⁶ Aragonese rule lasted until 1410.

⁴⁷ Four days later the Maltese people were allowed the free extraction of 300 *salme* of wheat from Licata: Giuseppe Silvestri, ed., *De Rebus Regni Siciliae (9 settembre 1282 - 26 agosto 1283), Documenti inediti estratti dall'Archivio della Corona d'Aragona e pubblicati dalla sovrintendenza agli Archivi della Sicilia* (Palermo, 1882), doc. 430, p. 316, in Wettinger, "The *Castrum Maris*," p. 36.

⁴⁸ Abualfia, "Henry the Count of Malta," p. 109.

⁴⁹ The *castellan*, da Barba seems to have resided in Mdina, the old castle in the center of the island and not in *Castrum Maris*, the port of Malta. He ordered all his subjects to respect Ugo de Cambrillis and his crew who were making a round trip to Malta from Sicily: Giuseppe Silvestri, ed., *De Rebus Regni Siciliae*, doc. 432, pp. 318-19, in Wettinger, "The *Castrum Maris*," p. 36.

⁵⁰ Giuseppe Silvestri, ed., *De Rebus Regni Siciliae*, doc 528, pp. 485-86, in Wettinger, "The *Castrum Maris*," p. 37.

⁵¹ Bernardo D'Esclot, "Cronaca del re don Pietro e dei suoi antecessori scritta da Bernardo D'Esclot," in *Cronache catalane del secolo XIII e XIV*, trans. Filippo Moisé (Palermo, 1984), pp. 525 § 111.

⁵² Roger of Lauria was appointed as the Admiral of the Crown, Catalonia, Valencia and Sicily on 12 April 1283. For detailed descriptions of the Battle of Malta, which is a turning point in the history of naval warfare see Lawrence V. Mott, "The Battle of Malta, 1283: Prelude to a Disaster," in *The Circle of War in the Middle Ages: Essays on Medieval Military and Naval History*, ed. Donald J. Kagay and Andrew L. J. Villalon (Suffolk 1999), pp. 145-85; John H. Pryor, "The Naval Battles of Roger of Lauria," *Journal of Medieval History* 9 (1983), 179-216.

⁵³ For a contemporary account of Roger Lauria's arrival and capture of Malta written in 1297, see Goffredo Malaterra, *Ruggero I e Roberto il Guiscardo*, trans. Vito Lo Curto (Cassino, 2002), pp. 299-305, [Cap. XVI].

⁵⁴ The presence of all these components of the typical Medieval Mediterranean port at *Castrum Maris* is indicated by the migration of a group of prominent families from Sicily and Aragon to Malta to form a ruling caste and become the leading merchants at the beginning of the fourteenth century. The names of these families are Italian or Spanish, as opposed to most of the population that had Arabic family names: Blouet, *The Story of Malta*, p. 45.

⁵⁵ For a brief reference about the nature of the pottery recovered after the excavations at the fifteenth-century church building at Hal Millieri see Anthony Luttrell, "Medieval Malta: The Non-Written and the Written Evidence," in *Malta. A Case Study in International Cross-Currents*, ed. Stanley Fiorini and Victor Mallia-Milanes, Proceedings of the First International Colloquium on the History of the Central Mediterranean (Malta, 1991), p. 42.

⁵⁶ Cutajar mentions the existence of these imported fragments very briefly (and without mentioning their provenance) in Cutajar, "Arabes et Normands à Malte," p. 81.

⁵⁷ Such as the fleet maintained by Venice to fight the pirates in the Adriatic, who presented threats to Venetian shipping: Richard W. Unger, *The Ship in the Medieval Economy 600-1600* (Montreal, 1980), p. 102.

⁵⁸ The War of Curzola is also known as the Second Genoese War in Venetian documents: Unger, *The Ship*, p. 181.

⁵⁹ Cheyette, "The Sovereign and the Pirates," p. 47.

⁶⁰ When a mariner attacked a "friend" ship, he either paid the damages or returned the stolen goods: Cheyette, "The sovereign and the Pirates," p. 57. The treaty signed in 1306 between the Venetians and Charles of Valois aimed to reinstate the Latin Empire of Constantinople in order to restore the safety of the commercial routes. As a result, the Venetians armed twelve galleys as

patrol ships with Charles' support. The strongest protest against this fleet came from Genoa and the Catalans since it left the Venetian ships free to commit piracy: Irene B. Katele, "Piracy and the Venetian State: The Dilemma of Maritime Defense in the Fourteenth Century," *Speculum* 63 (1988), p. 872.

⁶¹ Katele, "Piracy and the Venetian State," p. 865.

⁶² Cheyette, "The Sovereign and the Pirates," p. 67.

⁶³ Katele, "Piracy and the Venetian State," p. 867.

⁶⁴ The terrible famine, which laid waste the whole Europe from 1315 to 1317, caused great ravages. Thirty years later the Black Death from 1347 to 1530 carried off a third of the population of Europe and it was followed by a period of high prices: Henry Pirenne, *Economic and Social History of Medieval Europe* (New York, 1937), pp. 192-93. In the years immediately following the arrival of the Black Death in 1347, maritime cities found themselves deprived of invaluable manpower and, yet, paradoxically they were not without the means to pay for the services of sailors and ship builders if only men were to be found. Money, the money of the dead men was in plenty: David Abulafia, "Genoa and the Security of the Seas: The Mission of Babilano Lomellino in 1350," in *Commerce and Conquest in the Mediterranean 1100-1500* (Norfolk, 1993), p. 272.

⁶⁵ In addition, it is usually an ignored fact that piracy requires capital investment just like any merchant activity that required a contract. The document made in Genoa, in May 23, 1251 presents the earliest contract for corsairing activities: Robert S. Lopez, Irving W. Raymond, *Medieval Trade in the Mediterranean World* (New York, 1997), pp. 222 § 109.

⁶⁶ Katele, "Piracy and the Venetian State," p. 886.

⁶⁷ Bresc, "Sicile, Malte et Monde Musulman," pp. 65-66.

⁶⁸ Abulafia, "Genoa and the Security of the Seas," p. 273; Henri Bresc, "Les marines atlantiques dans les mers Siciliennes (1300-1460)," in *Medieval Ships and the Birth of Technological Societies*, ed. Christiane Villain-Gandossi, Salvino Busuttil and Paul Adam, 2 vols. (Malta, 1991), 2:141; Michael Metseltin, "La marina mediterranea en la descripcion de Ramon Muntaner" in *Medieval Ships and the Birth of Technological Societies*, ed. Christiane Villain-Gandossi, Salvino Busuttil and Paul Adam, 2 vols. (Malta, 1991), 2:316.

⁶⁹ That was accomplished by the Genoese treaty with Peter II (King of Sicily) in 1342 and renewed in 1350: Abulafia, "Genoa and the Security of the Seas," p. 275. Another document that reflects the fear of war, and the reluctance to launch an immediate offensive is a set of instructions to the captain of the fleet in the war of 1350-3, Babilano Lomellino. He was commanded to gather information about the activities of the Venetian galleys and protect the grain ships coming from Sicily in case of Venetian or Catalan interference. The original text is in *Archivio di Stato, Genoa, Matei e politiche 2737 A (18 A)*, no. 69; the information presented here is based on Abulafia, "Genoa and the Security of the Seas," p. 275.

⁷⁰ Scammell, *The World Encompassed*, p. 168.

⁷¹ Luttrell, "Approaches to Medieval Malta," p. 45

⁷² Of 109 vessels recorded as leaving Candia in Crete between July 1359 and June 1360 just one was bound for Malta: Luttrell, "Approaches to Medieval Malta," p. 42.

⁷³ Pinuccia F. Simbula, *Corsari e Pirati nei mari di Sardegna* (Cagliari, 1993), p. 215.

⁷⁴ Information is provided by Wettinger based on documents he studied at the Palermo State Archives. The original document is ASP RC (Archivio di Stato, Palermo, Real Cancellaria) 12, ff. 206-207, dated 4 January 1374, in Wettinger, "The *Castrum Maris*," p. 38.

⁷⁵ Luttrell, "Approaches to Medieval Malta," p. 46.

⁷⁶ These *servientes* are Henricus de Saso and Nicolaus de Homedes of Messina, then living in Malta, Bernardo Petrio of Majorca and Guglielmo Murina. Information is provided by Wettinger based on his research at the Palermo State Archives: ASP RC (Archivio di Stato, Palermo, Real Cancellaria) 6.1347, 1370, f. 209, dated 12 November 1372, in Wettinger, "The *Castrum Maris*," p. 38.

⁷⁷ Scammell, *The World Encompassed*, p. 169.

⁷⁸ Scammell, *The World Encompassed*, pp. 170-71.

⁷⁹ Luttrell, "Approaches to Medieval Malta," p. 46.

⁸⁰ Katele, "Piracy and the Venetian State," p. 868; Roberto Cessi, *Storia della repubblica di Venezia*, 2 vols. (Milan, 1946), 1: 261.

⁸¹ R. Predelli (ed.), *I Libri Commemorativi della Repubblica di Venezia: Regesti*, 5 vols. (Venice, 1879-1901), in Mallia-Milanes, *Venice and Hospitaller Malta*, p. 11.

⁸² Luttrell mentions that it is possible that this ship was a prize and was in the harbor to be sold. In his opinion Venice showed very little interest in the Central Mediterranean and Malta. However, Mallia-Milanes argues that available information is very fragmentary to allow such conclusions. For opposing arguments, see Luttrell, "Approaches to Medieval Malta," p. 46; Mallia-Milanes, *Venice and Hospitaller Malta*, p. 10.

⁸³ Martoni mentioned that there were as many as 4,000 hearths in Malta and 400 in Gozo. Lucien le Grand, "Relation du pèlerinage à Jerusalem de Nicolas de Martoni, notaire Italien: 1394-1395," *Revue de l'Orient Latin* 3 (1895), 578-579.

⁸⁴ Documents indicate that the Genoese had some role in these rebellions but the motive or the level of their involvement is not clear. It is likely that the events that had devastating long-term effects were just pirate attacks.

⁸⁵ Simbula, *Corsari e pirati*, pp. 211-12.

⁸⁶ Daniel Girona Llagostera, "Itinerari del Rey en Martí (1396-1402)," *Anuari de l'Institut d'Estudis Catalans* (1911-12), 4 (1913), p. 122, reg. 2242, f. 19; Luttrell, "Approaches to Medieval Malta," p. 47.

⁸⁷ Simbula, *Corsari e pirati*, pp. 209-33.

⁸⁸ Robert-Henri Bautier, "Les grands problèmes politiques et économiques de la Méditerranée médiévale," in *Commerce Méditerranéen et banquiers Italiens au Moyen Age* (Brookfield, VT., 1992), pp. 1-28.

⁸⁹ Simbula, *Corsari e pirati*, pp. 231-33.

⁹⁰ This information is based on the data provided by Wettinger based on his research at the Palermo State Archives. Original archival document, ASP RC (Archivio di Stato, Palermo, Real Cancellaria) 30, ff. 37-37v; Wettinger, "The *Castrum Maris*," p. 41.

⁹¹ ASP RC (Archivio di Stato, Palermo, Real Cancellaria) 46, f. 302, (15.iii.1406): Wettinger, "The *Castrum Maris*," p. 41.

⁹² Scammell, *The World Encompassed*, p. 167.

⁹³ Bautier "Les grands problèmes politiques," pp. 1-28.

⁹⁴ Unger, *The Ship*, pp. 220-21.

⁹⁵ Bresc, "Les marines atlantiques," pp. 141-42.

⁹⁶ Bresc, "Sicile, Malte et Monde Musulman," p. 73, Table II.

⁹⁷ A group of local noblemen who administered the island in the name of the King of Aragon.

⁹⁸ Carmelo Trasselli, "Naufragi, pirateria e doppio giuoco," in *Le genti del mare mediterraneo*, ed. Rosalba Ragosta, 2 vols. (Naples, 1981), 1:501.

⁹⁹ See above {Another document [ASP RC 46, f. 302, (15.iii.1406)] studied by Wettinger. Wettinger, "The *Castrum Maris*," p. 41.}

¹⁰⁰ Again, the original document, the decree of 19 July 1408, was studied by Wettinger (ASP RC 44-45, f. 327). Wettinger, "The *Castrum Maris*," p. 45.

¹⁰¹ S. Giambruna and L. Genuardi, *Capitoli Inediti delle città demaniali di Sicilia*, 2 vols. (Palermo, 1918), 1: 382 (Libr. 438, f. 247 and f. 239).

¹⁰² Wettinger, "The *Castrum Maris*," p. 46. This statement is based on the document (capitoli) ASP RC 51, ff. 87v-88, (11.ii.1416).

¹⁰³ Bresc, "Sicile, Malte et Monde Musulman," p. 65.

¹⁰⁴ Olivia R. Constable, *Trade and Traders in Muslim Spain: The Commercial Realignment of the Iberian Peninsula 900-1500* (Cambridge, 1996), p. 249.

¹⁰⁵ NLM 1141, f. 19v; NLM 23, f. 147; NLM 454, f. 16v. C. Galea Scannura, "The Office of the Secrezia of Malta Previous to the Coming of the Knights Hospitallers," *Melita Historica* 6 (1973), 108-109.

¹⁰⁶ Bresc, "Sicile, Malte et Monde Musulman," p. 65.

¹⁰⁷ Bresc, "Sicile, Malte et Monde Musulman," p. 72, table 1.

¹⁰⁸ Bresc, "Sicile, Malte et Monde Musulman," p. 74, table 2.

¹⁰⁹ Lists of ships that were involved in the voyages directed to Malta, those involved in piracy and corsairing, and simply listed as transport vessels, are provided at the end of the article by Bresc, "Sicile, Malte et Monde Musulman," p. 74, table 2.

¹¹⁰ Detailed records regarding the nature of these events and the names of the representatives survive in archival documents. NLM 1141, P.1, f.1, in Galea Scannura, "The Office of the Secrezia of Malta," pp. 109-10.

¹¹¹ Five percent of the loot was to be paid to the treasury of the King of Sicily to be used for repairs of the castle and to build ships for local defense: Charles Briffa, "Sea-Craft in Medieval Malta: Description and Etymology," in *Medieval Ships and the Birth of Technological Societies*, ed. Christiane Villain-Gandossi, Salvino Busuttil and Paul Adam, 2 vols. (Malta, 1991), 2:293.

¹¹² King Alphonse had already taken steps for the repair of the castle and allowed the *castellan* on 6 April 1429 to borrow the sum of 400 *uncie*. The inventory of the castle after the strengthening include 35 cross bows of different types and metal bombards of various sizes. Another inventory of the same date lists six cannons. There were also 104 short lances and 25 long ones, as well as 29 spears. Supplies included 29 *carisi* of oil, almost 3 butts of wine, 3 of vinegar, 57 *rotolos* of *sulphur* and ten *thumina* of saltpetre and some timber for siege engines. There was also a mill for grinding corn and its one mule: Henri Bresc, "The 'Secrezia' and the Royal Patrimony," in Anthony Luttrell, ed., *Medieval Malta. Studies on Malta Before the Knights* (London, 1975), pp. 159-60.

¹¹³ Galea Scannura, "The Office of the Secrezia," pp. 108-09.

¹¹⁴ For a detailed discussion and a list of the relevant documents dating to 1450, 1453 and 1494 see Galea Scannura, "The Office of the Secrezia," p. 117.

¹¹⁵ Bresc, "Sicile, Malte et Monde Musulman," p. 63-64.

¹¹⁶ Bresc, "Sicile, Malte et Monde Musulman," p. 66, 73 and table 2.

¹¹⁷ Bresc, "Sicile, Malte et Monde Musulman," p. 66.

¹¹⁸ The *nef* belonged to Vinchiguerra Vivaldi. Bresc, "Sicile, Malte et Monde Musulman," p. 66.

¹¹⁹ Bresc gives a list of such incidents that were experienced by the Maltese ships: Bresc, "Sicile, Malte et Monde Musulman," p. 69, notes 62 and 63.

¹²⁰ The Black Death may have been a combination of bubonic, pneumonic and septicaemic plague strains. For detailed descriptions of these see, Robert S. Gottfried, *The Black Death* (New York, 1983), pp. 1-15. But the initial, and major, strain was the bubonic plague, a disease that is typically spread by rodents with a deadly bacteria, *yersinia pestis*, in their blood. Several types of fleas infesting the rodents also ingest the bacteria, and spread the disease to humans. Once in human body, the bacteria move through the lymphatic system to the lymph nodes, form colonies, and cause the swelling of lumps, buboes, within three to eight days. In the next few days, the bacteria move to the vital organs and cause dark spots, bleeding from the skin and bowels, eventually causing the death of the individual. For a more detailed description of the disease and other types of diseases that may display similar symptoms see, Don Nardo, "Introduction: To Stem the Hideous Tide: The Black Death Decimates Europe," in *The Black Death*, ed. Don Nardo (San Diego, 1999), pp. 11-27.

¹²¹ David Herlihy, "Bubonic Plague: Historical Epidemiology and the Medical Problems," in *The Black Death and the Transformation of the West*, ed. Samuel K. Cohn (Cambridge, 1997), p. 24.

¹²² The first arrival of the plague to Europe is traditionally attested to a Genoese ship that arrived to Messina in 1347, with a sick crew and rats that carried the disease to land from the quarantined ship: Gottfried, *The Black Death*, p. xiii.

¹²³ Reliable information regarding the exact numbers is not available. The death toll presented here is based on the conventionally accepted figures: Sheldon Watts, *Epidemics and History* (Wiltshire, 1997), p. 1; Nardo, "Introduction," p. 11; Herlihy, "Bubonic Plague," p. 17. For more information about the origins and spread of the bubonic plague see, Michael W. Dols, "How the Black Death Entered and Spread Through Europe," in *The Black Death*, ed. Don Nardo (San Diego, 1999), pp. 41-47.

¹²⁴ Watts, *Epidemic*, p. 2.

¹²⁵ Nardo, "Introduction," p. 19; for detailed information about the death tolls in other European centers including Moscow, Novgorod, Milan, Berlin, Rome, Cremona (almost completely depopulated), Turin, Naples, London, Vienna, Danzig, Marseilles, and Toulon see, Johannes

Nohl, "The Black Death's Grim Death Toll," in *The Black Death*, ed. Don Nardo (San Diego, 1999), pp. 48-56. A detailed account of population loss in other commercial centers, including Prato, Pistoia, Orvieto, Siena, Montpellier, Carcasone, Montauban, Bordeaux, Perpignan, Avignon, the region of Languedoc, Valencia, and the Balearic Islands, see Gottfried, *The Black Death*, pp. 43-53. Gottfried also provides a detailed study of the plague's spread to the continent: Gottfried, *The Black Death*, pp. 54-76.

¹²⁶ Watts mention that the reasons for this phenomena are unknown but the fact that the spread of disease in Europe diminished is seen through the numbers. The reason he proposes include the rural character of European demographics as opposed to the over populated urban centers of the east that rendered the spread of disease possible. In addition to the demographics, social, cultural, and religious practices and mechanisms may have played a role in the control of the disease by local and central authorities: Watts, *Epidemic*, pp. 2-39.

¹²⁷ Archibald R. Lewis "The Islamic World and the Latin West, 1350-1500," *Speculum* 65 (1990), 838.

¹²⁸ The document referring to this is included in the publication of the manuscript "*Università II*", kept at the National Library, Valletta: Godfrey Wettinger, ed., *Acta iuratorum et consilii civitatis et insulae Maltae* (Palermo, 1993), doc. 611, p. 608.

¹²⁹ Wettinger, "The *Castrum Maris*," p. 65

¹³⁰ The town crier also announced that the crew of any vessel that left the harbor was to be stoned, shot with hand firearms and the ship would be burnt; Original documents in the Palermo State Archives studied by Wettinger (ASP RC 276, f. 611 and f. 326v): Wettinger, "The *Castrum Maris*," p. 68

¹³¹ About the end of the restrictions NLM Univ. 12, 360-361: Wettinger, "The *Castrum Maris*," p. 70.

¹³² Bresc, "Les marines atlantiques," p. 143.

¹³³ Gerónimo Zurita y Castro, *Anales de la Corona de Aragón* (Saragoza, 1967), p. 558.

¹³⁴ Unfortunately Galea Scannura did not note the archival source for this particular information: Galea Scannura, "The Office of the Secrezia," p. 115.

¹³⁵ NLM 1226, ff. 110-111; NLM 1141, Part (P) II (*Capibrevium Insule Meliveti et Gaudisii Iurium Regalium Insularum et Secretiae decte civitatis Meliveti et Insule*) ff. 12 v 1-5: Galea Scannura, "The Office of the Secrezia," p. 115.

¹³⁶ Wettinger provides a number of examples of such transactions: Wettinger, "The *Castrum Maris*," pp. 62-63

¹³⁷ The contracts seem to be *commenda* type contracts but the type of merchandise or the port of destination is unfortunately not mentioned in the published sources.

¹³⁸ Felucca is a two-masted lateen-rigged vessel with an overhanging stern and an extended stem. It is a narrow and speedy vessel. Number of masts change according to period. Briffa, "Sea-Craft in Medieval Malta," pp. 294-95.

¹³⁹ In 1527 the Jurats were still writing to convince the viceroy of the immediate necessity to repair the galleys and the fortifications. Galea Scannura, "The Office of the Secrezia," p. 116.

¹⁴⁰ Cheyette, "The Sovereign and the Pirates," p. 67.

¹⁴¹ Cheyette, "The Sovereign and the Pirates," p. 54.

¹⁴² Goodwin, *Malta*, pp. 32-33.

¹⁴³ Blouet, *The Story of Malta*, p. 45.

Notes to Chapter IX

¹ Robert L. Dauber, "Knights of the Sovereign and Military, Religious and Hospitaller Order of Saint John of Jerusalem, of Rhodes and of Malta in the National Navies of Europe 1300-1600," in *Aspect and Actuality of Sea Power in the Mediterranean from XII to XVI Century*, ed. Paolo Alberini, Acta del convegno di storia militare tenuto a Napoli (Rome, 1999), pp. 209-10; Victor Mallia-Milanes, "Introduction to Hospitaller Malta," in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of Saint John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), pp. 1.

² Joseph Muscat, "The Warships of the Order of Saint John 1530-1798," *The Malta Historical Society Proceedings of History Week 1994*, ed. Stanley Fiorini (Malta, 1996), p. 77.

³ Eric Brockman, *Last Bastion. Sketches of the Maltese Islands* (London, 1961), p. 160.

⁴ Dauber, "Knights of the Sovereign and Military," p. 210; Muscat, "The Warships of the Order," p. 77.

⁵ About the Order of Saint John during the period they were established in Rhodes see, Nicolas Vatin, *L'Ordre de Saint-Jean-de Jérusalem, l'Empire Ottoman et la Méditerranée orientale entre les deux sièges de Rhodes, 1480-1522* (Paris, 1994); Nicolas Vatin, *Rhodes et l'Ordre de Saint-Jean-de-Jérusalem* (Paris, 2000).

⁶ Alison Hoppen, "Military Priorities and Social Realities in the Early Modern Mediterranean: Malta and its Fortifications," in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of Saint John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), p. 400.

⁷ An excellent source about the sixteenth century Mediterranean: Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II* (Berkeley and Los Angeles, 1995).

⁸ For an excellent and updated study of the Ottoman maritime expansion see Palmira Brummett, *Ottoman Seapower and Levantine Diplomacy in the Age of Discovery* (New York, 1994).

⁹ The treaty included an article regarding the evacuation of the island. In case the Order did not have enough vessels to transport its belongings and people, the Turks would furnish them with vessels. Although there are no direct references to the use of Turkish vessels, it is possible that some of the vessels used for evacuation were borrowed: Claude Petiet, *Des Chevaliers de Rhodes aux chevaliers de Malte: Villiers de L'Isle Adam* (Paris, 1994), p. 251.

¹⁰ Including the icon of Notre Dame of Philermos, one small pipe organ painted with gold, and other art objects from the auberges and churches; Claire Éliane Engel, *Histoire de l'Ordre de Malte* (Paris, 1968), p. 176.

¹¹ Iacomo Bosio, *Histoire des Chevaliers de L'Ordre de S. Jean de Hiervsalem*, trans. Pierre de Boissat (Paris, 1643), 9.9.568.

¹² We also see Bosio assigned with the mission of going to Rhodes to assess the chances of arranging an uprising against the Turks by L'Isle Adam: Petiet, *Des Chevaliers de Rhodes*, p. 286.

¹³ Petiet, *Des Chevaliers de Rhodes*, pp. 284-87.

¹⁴ Barbarossa became the admiral of the Ottoman navy in 1533 and served until 1546. Prior to this date he was an autonomous ruler.

¹⁵ Francesco Balbi, *The Siege of Malta* (Copenhagen, 1961), p. 11.

¹⁶ Ernle Bradford, *The Shield and the Sword: The Knights of Saint John, Jerusalem, Rhodes and Malta* (New York, 1973), p. 121.

¹⁷ Marcello Maria Marrocco Trischitta, *Knights of Malta. A Legend towards the Future* (Rome, 1999), p. 13.

¹⁸ Nicolas Vatin, *L'Ordre de Saint Jean de Jérusalem, l'Empire ottoman et la Méditerranée orientale entre les deux sièges de Rhodes, 1480-1522* (Paris, 1994), p. 297.

¹⁹ Even the Knights traded with the Muslims, especially for grain since the supply of this commodity to Malta was entirely imported from Syria and Egypt: Claire Éliane Engel, *L'Ordre de Malte en Méditerranée* (Monaco, 1957), p. 149.

²⁰ Richard W. Unger, *The Ship in the Medieval Economy 600-1600* (Montreal, 1980), pp. 240-41.

²¹ Engel, *L'Ordre de Malte en Méditerranée*, p. 145.

²² Frederic Chapin Lane, *Venice: A Maritime Republic* (Baltimore, 1973), pp. 246-48.

²³ Historical sources mention that Rhodian pirates seized a Turkish ship in a Venetian port and a Venetian ship between Coron and Modon in 1504. AOM 394 250r. Also see, Vatin, *L'Ordre de Saint Jean de Jérusalem*, p. 295.

²⁴ Complaints by these cities were filed between 1517 and 1520: Vatin, *L'Ordre de Saint Jean de Jérusalem*, p. 300.

²⁵ For the position of Venice against the replacement of the Order's base in the southern Aegean see Trischitta, *Knights of Malta* (Rome, 1999), p. 13.

²⁶ This number became eight when the Spanish langue split into those of Castile-Portugal and Aragon. Also, in 1782 the two *Langues* of England and Germany were brought together through the creation of an Anglo-Bavarian Langue by the Grandmaster Emmanuel de Rohan and the elector of Bavaria, with the consent in 1783 of King George III of England.

²⁷ One of the major income source was the timber from these lands. The priors controlled the felling of trees and the quantity of the timber being sold. In addition to timber, one of the major commodities of the period, there were other products such as agricultural produce and wine that was offered to European markets: Engel, *L'Ordre de Malte en Méditerranée*, pp. 141-42.

²⁸ Indeed, in the end, the collapse of the Order came as a result of the seizure of their lands in France, when the *Loi Spoliateur* was passed by the Revolutionary government in 1792: Peter Earle, *Corsairs of Malta and Barbary* (London, 1970), pp. 103-05.

²⁹ Earle, *Corsairs of Malta*, pp. 103-05.

³⁰ The King stated that he would not only seize the property but he would employ the revenue from those lands to conduct a crusade against the Moors of the Barbary coast and exclude the Order in this crusade, since they would be inactive without these resources: Petiet, *Des Chevaliers de Rhodes*, p. 301.

³¹ This was 1050 gold *ecus* and was a very high price. That is why the Knights not only came from noble families, but also wealthy families. Some Knights had protectors who sponsored their membership: Engel, *L'Ordre de Malte en Méditerranée*, p. 142.

³² The Knights did not want to take Tripoli since it was a very difficult fort to defend. However, Charles V insisted that Tripoli be included in the package and there would be no agreement unless they took the North African fortress: Engel, *L'Ordre de Malte en Méditerranée*, p. 313.

³³ Petiet, *Des Chevaliers de Rhodes*, p. 41.

³⁴ Bosio, *Histoire des Chevaliers*, 10.4.280.

³⁵ The quote is from Mallia-Milanes who gracefully describes the situation: Victor Mallia-Milanes, "Introduction to Hospitaller Malta," in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of Saint John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), p. 4; the information is partly based on Bosio's account of the 1524 report, Bosio, *Histoire des Chevaliers*, 10.4.280 and 281. For the reaction of the Knights to the decision see Balbi, *The Siege of Malta*, p. 12, who mentions that when the Knights first saw the barren sun-dried archipelago in the horizon, "they wept, remembering Rhodes." Also see Brian Blouet, *The Story of Malta* (Malta, 1993), p. 49.

³⁶ Balbi, *The Siege of Malta*, p. 11.

³⁷ It was already snowing when they left Rhodes, indicating that it was probably an exceptionally bad winter. Petiet, *Des Chevaliers de Rhodes*, p. 265.

³⁸ Trischitta, *Knights of Malta*, p. 13.

³⁹ Trischitta, *Knights of Malta*, p. 14.

⁴⁰ Ettore Rossi, *Storia della Marina dell'Ordine di S. Giovanni di Gerusalemme di Rodi e di Malta* (Rome, 1926), pp. 31-32.

⁴¹ The opinion presented here is based on the author's study of these paintings to be published as a separate article.

⁴² Christiane Villain-Gandossi, "Illustration of Ships: Iconography and Interpretation," in *Cogs Caravels and Galleons: The Sailing Ship 1000-1650*, ed. Robert Gardiner (Annapolis, 1994), p. 169.

⁴³ Villain-Gandossi, "Illustration of Ships," p. 171.

⁴⁴ With the exception of Bosio and the Saint Maximin painting.

⁴⁵ Perhaps the most obvious example of this phenomenon is a curious account from 1751. A pre-novice of the Order wrote in his diary that he saw the "breaking up of the *galley of Rhodes*" during his stay in Malta. It is possible that a galley associated with Rhodes or captured later by the Hospitaller corsairs around the island was being decommissioned at this date, but there is no

reason to believe that this vessel was part of the original fleet that arrived to Malta in 1530. For the account see, NLM 1146 d 1/11.f.819.

⁴⁶ Eric Brockman, *Last Bastion* (London, 1961), p. 159.

⁴⁷ The Order was the latest to use galleys as its main fighting force, its galleys were active until the end in 1798. The French navy's galleys were disarmed in 1748 and they were the second from the last to go out of use: Claude Petiet, *L'Ordre de Malte face aux Turcs: Politique et stratégie en Méditerranée au XVIe siècle* (Paris, 1996), p. 67.

⁴⁸ The bench-end carving from the Chapel of St. Nicholas in King's Lynn represents the earliest carrack type hull and a lateen-rigged mizzen: Ian Friel, "The Carrack: The Advent of the Full Rigged Ship," in *Cogs, Caravels and Galleons*, ed. Robert Gardiner and Richard W. Unger (Annapolis, 1994), p. 77.

⁴⁹ Friel, "The Carrack," pp. 86-87.

⁵⁰ There is some evidence that primitive cannon or *gonnes*, were carried aboard war galleys as early as the first decades of the fourteenth century, though it is unclear whether they were intended to be fired afloat or were transported for use ashore. The earliest European depictions of shipborne guns are contained in the Walter de Milimete manuscript dating from about 1327, and show small guns (about 1 to 2.25 m long and about 0.3 to 0.75 m in diameter): John F. Guilmartin, "Guns and Gunnery," in *Cogs, Caravels and Galleons*, ed. Robert Gardiner and Richard W. Unger (Annapolis, 1994), pp. 143-44. Historic documents indicate that the earliest naval cannon was supplied for an English royal ship in the years 1337-38. But a typical ship only carried two or three breech-loading wrought iron cannons – *lombards* or *bombards* – in the first quarter of the fifteenth century: Friel, "The Carrack," p. 87.

⁵¹ The invention of the gunport has been traditionally attributed to a French shipwright from Brest named Descharges, in 1501. Before the introduction of a port with a hinged watertight lid, the heavy guns were placed on the weather deck or in the castles. However, there were only so many cannons a ship could carry in this fashion without making the vessel top heavy and, thus, unstable: Friel, "The Carrack," p. 89. At this time, the guns were stored in the hold and were lifted up each time they had to be used: Guilmartin, "Guns and gunnery," p. 145.

⁵² For more detailed information about the specific characteristics of cast bronze guns and what makes them superior see, Guilmartin, "Guns and gunnery," p. 146.

⁵³ There was a small cast iron hailshot piece on *Mary Rose* (sunk in 1545). The casting of iron guns in England started in 1543: Guilmartin, "Guns and gunnery," p. 149.

⁵⁴ Unger, *The Ship*, pp. 234-35.

Notes to Chapter X

¹ Robert L. Dauber, “Knights of the Sovereign and Military, Religious and Hospitaller Order of Saint John of Jerusalem, of Rhodes and of Malta in the national Navies of Europe 1300-1600,” in *Aspect and Actuality of Sea Power in the Mediterranean from XII to XVI Century*, ed. Paolo Alberini, Acta del Convegno di Storia Militare tenuto a Napoli (Rome, 1999), p. 214.

² Joseph Muscat, “The Warships of the Order of Saint John 1530-1798,” *The Malta Historical Society Proceedings of History Week 1994*, ed. Stanley Fiorini (Malta, 1996), p. 78.

³ Dauber, “Knights of the Sovereign and Military,” p. 214.

⁴ For information about the two *congregazioni*, see NLM AOM 1759 ff. 131 *et seq* and AOM 1761 f. 21: Muscat, “The Warships of the Order,” p. 78.

⁵ Additional *caravans* would provide quick advancement up the ranks leading to speedy promotion in the Order. Muscat mentions that the *caravan* system was an attractive method of keeping the lively younger Knights busy outside Malta who would otherwise cause a lot of trouble “if left idling in Valletta.” For archival documents regarding the basic structure of the system, see AOM 1759 ff. 114, in Muscat, “The Warships of the Order,” p. 78.

⁶ For detailed information about the regulations concerning the introduction of new Knights see, Claire Éline Engel, *L'Ordre de Malte en Méditerranée* (Monaco, 1957), pp. 79-107.

⁷ The service called the *caravan* was to be performed at one of the main seats of the order in Malta. It could be in one of the military, hospitaller or religious services, depending on the skills and interests of the novices: Dauber, “Knights of the Sovereign and Military,” p. 212.

⁸ Robert von Dauber and Antonio Spada, *The Navy of the Sovereign Military Order of Malta* (Brescia, 1992), p. 91.

⁹ Dauber, “Knights of the Sovereign and Military,” p. 212.

¹⁰ Muscat, “The Warships of the Order,” pp. 77-78, 82.

¹¹ Joseph Muscat, “The Arsenal: 1530-1798,” in *Birgu: A Maltese Maritime City*, ed. Lino Bugeja, Mario Buhagiar and Stanley Fiorini (Malta, 1993), p. 259; Salvatore Bono, “Naval Exploits and Privateering,” in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of Saint John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), p. 378; Ettore Rossi, *Storia della marina dell'Ordine di S. Giovanni di Gerusalemme di Rodi e di Malta* (Rome, 1926), p. 31.

¹² For detailed studies of this topic see John Francis Guilmartin, *Gunpowder and Galleys: Changing Technology and Mediterranean Warfare at Sea in the Sixteenth Century* (London, 1974); John Francis Guilmartin, *Galleons and Galleys* (London, 2002); Robert Gardiner, ed.,

The Age of the Galley. Mediterranean Oared Vessels since Pre-Classical Times (Annapolis, 1995).

¹³ The only large-scale naval battles that involved fighting between two galley fleets off shore were Prevesa in 1538, Djerba in 1560 and Lepanto in 1571.

¹⁴ Hervé Coutau-Bégarie, "Seapower in the Mediterranean in the 18th and 19th centuries," in *Law, Strategy and Policy in the Mediterranean*, ed. John B. Hattendorf (Newport, 1999). For an excellent analysis of this idea see Guilmartin, *Gunpowder and Galleys*.

¹⁵ Muscat gives the figure of eight years, while Grima favors a shorter period of six years as a more common service period for a galley: Joseph Muscat, *The Maltese Galley* (Malta, 1998), p. 7; Joseph F. Grima, "Galley Replacements in the Order's squadron (c.1600-c.1650)," *Melita Historica* 8.1 (1980), 48. Some galleys lasted for ten or twelve years but they were treated as being old and not fit for active service at sea: Bartolomeo dal Pozzo, *Historia della sacra religione militare di S. Giovanni Gerosolimitano detta di Malta*, 4 vols. (Verona, 1703-1715), 1:395. Bosio refers to an 18 year old *bastarda* as 'very old': Iacomo Bosio, *Histoire des Chevaliers de L'Ordre de S. Jean de Hiervsaleme*, trans. Pierre de Boissat (Paris, 1643), 9.11.208. On the other hand, contemporary galleys built in Genoa were used for about ten years and still had a considerable sale value after that: Vilma Borghesi and Manlio Calegari, "La nave bertorota (1547-1561)," in *Guerra e commercio nell'evoluzione della marina Genovese tra XV e XVII secolo* (Genoa, 1970), I: 104. The maximum service period for a galley in seventeenth-century France was about ten years, although most served only for two to five years. The reason for the shortness of these periods is due to the use of green timber at French arsenals: Paul Walden Bamford, *Fighting Ships and Prisons* (St. Paul, MS., 1973), pp. 80-81.

¹⁶ Muscat, *The Maltese Galley*, p. 6.

¹⁷ Muscat, *The Maltese Galley*, p. 7.

¹⁸ This type of galley was called 'commandante' in the French fleet: Jan Fennis, *Un manuel de construction des galères* (1691; repr. Amsterdam & Maarsen, 1983), p. 254. The *Capitana* was sometimes called *bastarda*: Joseph M. Wismayer, *The Fleet of the Order of Saint John 1530-1798* (Malta, 1997), p. 17.

¹⁹ The number of benches is known to be up to 30 per side. NLM 413, f. 185; AOM 17559, f. 463, in Muscat, "The Arsenal," p. 274.

²⁰ Muscat, "The Arsenal," p. 274.

²¹ Fredrik Henrik af Chapman, *Architectura Navalis Mercatoria* (1775; repr. Leipzig, 1968), p. 68, Plate LVIII no. 18.

²² For information on the *padrona* (unfortunately without references) see Claude Petiet, *L'Ordre de Malte face aux Turcs. Politique et stratégie en Méditerranée au XVIe siècle* (Maulévrier, 1996), pp. 68-72. Fennis' treatise mentions that in the French fleet the 'patrones' stood out as

these and the 'reale', the flagship, were the only vessels in the fleet with stern decorations: Fennis, *Un manuel de construction*, p. 157; Bamford, *Fighting Ships*, p. 71.

²³ One bench on the port side was frequently removed to provide space for cooking purposes. These galleys were about 50 meters long and 6 meters wide. The oar of a galley measured at least 10 meters and was 12 centimeters in diameter: Joseph Muscat, "The Warships of the Order of Saint John 1530-1798," *The Malta Historical Society Proceedings of History Week 1994*, ed. Stanley Fiorini (Malta, 1996), p. 86; Wismayer, *The Fleet of the Order*, p. 16.

²⁴ The galleys were rowed *a scaloccio* after the introduction of this rowing system in the mid-sixteenth century, meaning that all rowers sitting on the bench of a Maltese galley were pulling the same oar, as opposed to having their individual oars (*alla sensile*): Muscat, "The Warships of the Order," p. 87.

²⁵ For the employment of the *galleot* by the Order, see, Bosio iii, 188. Information regarding the specific features of the vessel are from Muscat, "The Warships of the Order," p. 90.

²⁶ Muscat, "The Warships of the Order," p. 89. According to Humbert, a *galleot* is simply the term used for oared ships smaller than a galley and larger than a frigate. According to Humbert's description the terms demi-galley and *galleot* are terms referring to the same type of ship: Jacques Humbert, *La galère du XVIIème siècle* (Grenoble, 1986), p. 7.

²⁷ For detailed information and calculations about the amount and weight of the provisions carried by contemporary oared ships see, John E. Dotson, "Economics and Logistics of Galley Warfare," in Robert Gardiner ed., *The Age of the Galley* (London, 1995), p. 219.

²⁸ Muscat, "The Warships of the Order," pp. 91, 107. A French treatise from the seventeenth century indicates that the flagship (equivalent of the capitana in the Order's fleet) would carry a *galleot* (of 15 oars – per side) as the ship's boat, in addition to the usual *caïque* and 'canot'. "Memoire sur les manœuvres et sur les agres d'une galère, dans lequel il est parlé de l'usage particuliers de chacune de ces pieces," in Jan Fennis, *Un manuel de construction des galères* (1691; repr. Amsterdam & Maarsen, 1983), p. 254.

²⁹ AOM 269 f. 198, in Muscat, "The Warships of the Order," p. 107.

³⁰ It is unlikely that the *galleots* built 23 years earlier were still in service. These three must be later additions. AOM 272 f. 3v, in Muscat, "The Warships of the Order," p. 107.

³¹ This small *galleot* performed three cruises between February 8 and March 21, 1722; April 7 and June 28, 1722; and a last cruise that started on July 20, 1722. In the first two cruises, the vessel captured two small Muslim prizes, the second one with a cargo of timber. For archival references, see Muscat, "The Warships of the Order," p. 107.

³² Muscat, "The Warships of the Order," p. 108.

³³ AOM 269 ff. 241v, 249v.

³⁴ AOM 269 f. 234v. Muscat, "The Warships of the Order," p. 104.

³⁵ Muscat, "The Warships of the Order," p. 105.

³⁶ In addition to the money saved through the reduced number of crew and rowers (60 sailors and 250 rowers), the short galley was more economic as it carried less guns (24 pounder coursier and two lateral guns with a caliber of 12 pounds): Muscat, "The Warships of the Order," p. 103.

³⁷ The following documents include lists of the ships in 1798: AOM 1934A ff. 13,14v, 15, 15v, 18; AOM 274 f. 209v, in Muscat, "The Warships of the Order," p. 104.

³⁸ Muscat, "The Warships of the Order," pp. 105-106.

³⁹ According to the information provided by Muscat the maximum number of guns on a corsair *chebec* is known to be 24. Merchant *chebecs* carried four to six guns. A corsair *chebec* would also be armed with several *perriers* or swivel guns see Muscat, "The Warships of the Order," p. 106.

⁴⁰ Chapman, *Architectura Navalis*, p. 68, plate LVIII no. 17.

⁴¹ AOM 269 f. 248v, mentions that it was escorted by two galleys: Muscat, "The Warships of the Order," p. 105.

⁴² AOM 270 f. 263 in Muscat, "The Warships of the Order," p. 105.

⁴³ AOM 1860 f. 6 and AOM 269 f. 248v, Muscat, "The Warships of the Order," p. 105.

⁴⁴ The information presented here is provided by Muscat but it seems that the ship would have fewer crew than guns, which is an unlikely situation: Muscat, "The Warships of the Order," p. 106. In my opinion, for the armed chebecs, the number of guns must have determined the size of the crew.

⁴⁵ Chapman, *Architectura Navalis*, p. 68, Plate LVIII no. 17.

⁴⁶ AOM 1759 f. 365v, in Muscat, "The Warships of the Order," p. 95.

⁴⁷ Dal Pozzo, *Historia della sacra religione*, 1: 586, 587.

⁴⁸ Muscat, "The Warships of the Order," p. 95.

⁴⁹ For a list of all vessels arriving in Malta in 1530, see Bosio, *Histoire des Chevaliers*, 10.9.297; for the attack on Modon, see Abbé de Vertot, *The History of the Knights of Malta*, 2 vols. (1728; repr. Malta, 1989), 2:46-50; Rossi, *Storia della marina*, p. 36; Ubaldino Mori Ubaldini, *La marina del Sovrano militare ordine di San Giovanni di Gerusalemme, di Rodi e di Malta* (Rome, 1971), pp. 134-37. Petiet mentions that the squadron was comprised of four galleys in 1532 but

since he does not provide a reference for this information we cannot be certain of its reliability: Petiet, *L'Ordre de Malte face aux Turcs*, pp. 73-74.

⁵⁰ It is possible that one of the galleys was engaged with some other duty such as escorting or provisioning during the conquest of Peñón de Velez, as there is no indication that a decision to reduce the number was taken. Additional information and references available in Appendix E.

⁵¹ For detailed information about the fortifications, see Quentin Hughes, *Malta: A Guide to the Fortifications* (Valletta, 1993); Denis de Lucca, "The Fortifications of Birgu," in *Birgu: A Maltese Maritime City*, ed. Lino Bugeja, Mario Buhagiar and Stanley Fiorini (Malta, 1993), pp. 519-35.

⁵² According to Quarantine registers the number of the galleys forming the squadron between 1657 and 1668 was five. However, this may have been the number of ships that took part in the corsairing cruise of that year, and may not reflect the total number. For the figures see, Dominic Cutajar, "The Malta Quarantine Shipping and Trade 1654-1694," in *Mid-Med Bank Limited. Report and Accounts 1987* (Malta, 1988), p. 56, table 2.

⁵³ For detailed information regarding the naval events of this period, see Chapter XI, section titled Warlike Expeditions.

⁵⁴ Muscat gives the figure of eight years, while Grima favors a shorter period of six years as a more common service period for a galley: Muscat, *The Maltese Galley*, p. 7; Grima, "Galley Replacements," p. 48. Some galleys lasted for ten or twelve years but they were treated as being old and not fit for active service at sea; Dal Pozzo, *Historia della sacra religione*, 1:395. There are very few references concerning the galleys' capture, sinking or loss. Such events are ignored in this calculation to acquire an estimate, and provide a comparative framework in which the quantity and size of the construction activities can be assessed.

⁵⁵ The entrance to Valletta is not on the coast. The Arsenal building stood on the site of the former Opera House. This building had nothing to do with shipbuilding except that it housed a reserve of the materials issued whenever they were required by the galleys and other ships of the line: Rossi, *Storia della marina*, p. 103; Muscat, "The Arsenal," p. 258.

⁵⁶ NLM 223; AOM 256, f. 160v, in Muscat, "The Arsenal," p. 258. For more information about the distinctions between an arsenal and *darsena*, see Alberto P. Guglielmotti, *Storia della Marina Pontificia* (Rome, 1886-1893), 3:128; Muscat suggests this distinction since a shelter planned at Marsamxett harbor in Malta was intended as a *darsena* see, Muscat, "The Arsenal," p. 258.

⁵⁷ Rossi, *Storia della marina*, p. 103.

⁵⁸ J. Sandwich, *A Voyage Performed by the Late Earle of Sandwich Round the Mediterranean in the Years 1738 and 1739* (London, 1799), p. 514.

⁵⁹ The exact location of the first shipyard in Birgu is not well known. Muscat provides a list of possible locations based on several historical sources: Muscat, "The Arsenal," pp. 259-60.

⁶⁰ Rossi, *Storia della marina*, p. 104.

⁶¹ Muscat, "The Arsenal," p. 270.

⁶² This oversimplified calculation is included just to give an approximate idea about the size of this industry and a comparative number. The assumption here is that the arsenal in Malta did not construct more than one galley at once. The reason for this assumption is the absence of evidence suggesting otherwise and the additional maintenance duties the arsenal is involved in. From the old paintings it is understood that the arsenal was a building with three arches, and could accommodate three vessels simultaneously. For the information about the four year long construction, see Muscat, *The Maltese Galley*, p. 7.

⁶³ Compiled from different sources by Muscat, "The Arsenal," p. 271, table I. Muscat does not indicate whether the dates represent the launching dates or the date on which the construction begun.

⁶⁴ Based on the information in Muscat, "The Arsenal," p. 271, table I.

⁶⁵ Jacques Humbert, *La galère du XVIIème siècle* (Grenoble, 1986), p. 223.

⁶⁶ Robert C. Davis, *Shipbuilders of the Venetian Arsenal* (Baltimore, 1991), p. 81.

⁶⁷ Ennio Concina, *Navis: l'umanesimo sul mare (1470-1740)* (Turin, 1990), p. 198; Muscat, *The Maltese Galley*, p. 7; André Plaisse, *Le Rouge de Malte* (Rennes, 1991), pp. 92, 93.

⁶⁸ Dal Pozzo, *Historia della sacra religione*, 1:62; Pierre Marie Louis de Boisgelin de Kerdu, *Ancient and Modern Malta*, 2 vols. (London, 1805), 1:321; Muscat, "The Arsenal," p. 309. Cutajar also mentions timber, iron, and nail shipments from the Dalmatian ports based on his study of the quarantine records, see Cutajar, "The Malta Quarantine Shipping," p. 53.

⁶⁹ AOM 270, ff. 53,70 and 272. ff. 190v, 225; Muscat, "The Arsenal," p. 309.

⁷⁰ AOM 663, f. 159v, 9 October 1610; Grima, "Galley Replacements," p. 51.

⁷¹ AGPV 43, *1762 2 Aprile in Pregadi* and *1770 26 Aprile in Pregadi*; Muscat, "The Arsenal," p. 310.

⁷² AOM 257, f. 102v, dated 11 January 1642, is a document providing the orders given to the squadron to escort a galleon carrying a cargo of timber on its return journey from Marseilles: Grima, "Galley Replacements," p. 51.

⁷³ AOM 449, f. 269v, dated 28 March 1596, is a document that includes an order given to the Captain General regarding the investigation of the availability of timber in Calabria. AOM 453, f. 205v and 257v, 27 April 1600 and 10 August 1600, indicates that the Captain General was ordered to purchase three masts in Trapani: Grima, "Galley Replacements," p. 51.

⁷⁴ Maltese names such as Carlo Grech Delicata, Pietro Felice, Giuseppe Grech, Carlo and Antonio Mattei are mentioned in relation to the timber shipments. However, the nature of the treaties between the Order and Venice make it clear that the transaction was directly between the grandmaster and the Serenissima. For the list of documents mentioning Maltese names see AGPV 43: Muscat, "The Arsenal," p. 310.

⁷⁵ Muscat, *The Maltese Galley*, p. 6.

⁷⁶ AOM 256, f. 104v, 8 March 1632, illustrates that the Venerable Council decided to compare the terms offered by Genoese and Neapolitan shipyards for the construction of a new galley: Grima, "Galley Replacements," p. 50.

⁷⁷ Victor Mallia-Milanes, *Venice and Hospitaller Malta* (Malta, 1992), pp. 251-53, 257, 261; Muscat, "The Arsenal," pp. 284-88, 297-300, 309-12, 324.

⁷⁸ John McManamon, "Maltese Seafaring in Medieval and Post-Medieval Times, 870-1798," forthcoming.

⁷⁹ AOM 451, f. 253r, 4 August 1598 mentions that the galley *San Placito* was left in the shipyard at Messina after its equipment and crew was transferred to its replacement. AOM 101, f. 91v, 5 November 1604, mentions the Council's decision about the breaking up of the galley *San Martin*: Grima, "Galley Replacements," p. 51.

⁸⁰ The document AOM 256, f. 121r, 23 September 1634 mentions a galley replacement during which the old galley was also brought back to Malta laden with timber. NLM 676, f. 173r, 28 May 1643 mentions that in 1643, the old *Capitana* was maintained as a seaworthy vessel for emergencies after its replacement: Grima, "Galley Replacements," p. 51.

⁸¹ AOM 456, f. 292r, 20 March 1608: Grima, "Galley Replacements," p. 51.

⁸² AOM 454, f. 260r, 4 May 1602. This document indicates that the squadron was given the order to 'conduct' two *buchi* of galleys constructed at Genoa: Grima, "Galley Replacements," p. 51.

⁸³ The information is from a source concentrating on the coins from the period of the Order of Saint John, www.degreeminiatures.com/castings/rcoins.html.

⁸⁴ The more expensive *Capitana*'s replacement would cost about 10,000 *scudi*. AOM 109, f. 37v, 22 September 1627: Grima, "Galley Replacements," p. 49.

⁸⁵ For detailed information about the slave prices and these transactions, see Joseph Muscat, "The Maltese Corso," in *Méditerranée, Mer Ouverte*, ed. Christiane Villain-Gandossi, Louis Durteste and Salvino Busuttil, Actes du colloque de Marseille (Malta, 1997), 1: 205.

⁸⁶ Dal Pozzo, *Historia della sacra religione*, 1:496; Joseph F. Grima, "The Maintenance of the Order's Galley Squadron (c. 1600-1650)," *Melita Historica* 7.2 (1977), p. 145.

⁸⁷ AOM 112, f. 38.

⁸⁸ NLM 162, f. 106v: Grima, "The Maintenance," p. 145.

⁸⁹ Jaime Salva, *La Orden de Malta y las acciones navales españolas contra Turcos y Berberiscos en los siglos XVI y XVII* (Madrid, 1944), p. 82.

⁹⁰ Brian Blouet, *The Story of Malta* (Malta, 1993), pp. 104-05.

⁹¹ The Order's Treasury paid for the majority of the expenditure and this was estimated at around 8,398 *scudi* 9 *tari*. The Captain paid a share of 2,811 *scudi* 5 *tari* 10 *grani* but this break-down of the expenditure accounted for 720 days only. The remaining ten days had to be made good by the galley captain, an expenditure estimated at 100 *scudi*. Captain also had additional expenses, such as bonuses. Grima provides a detailed account of these expenditures: Grima, "The Maintenance," p. 146.

⁹² NLM 162 ff. 111v-112v: in Grima, "The Maintenance," pp. 146-47. 20 *grani* = 1 *tari*, 12 *tari* = 1 *scudo*.

⁹³ Grima, "The Maintenance," p. 147.

⁹⁴ AOM 1427, 29 December 1649: Grima, "The Maintenance," pp. 147-48.

⁹⁵ Grima, "The Maintenance," p. 148.

⁹⁶ AOM 112, f. 38r-v, 25 May 1637; NAVR 476/29, Deeds of Notary Pietro Vella, ff. 377 v-390r; all dated 20 July 1637: Grima, "The Maintenance," p. 150.

⁹⁷ But asked for 23,000 *scudi* for the maintenance of the larger *Capitana*, a request which was acceded to by the Council. AOM 112, f. 53r; AOM 737, ff. 79v, 87r-93v; NAVR 476/29, Deeds of Notary Pietro Vella, ff. 377v-390r; all dated 20 July 1637: Grima, "The Maintenance," p. 148.

⁹⁸ About the call for tenders, AOM 257, f. 96r, 8 November 1641; Valdina's second contract, AOM 227 f. 367r; AOM 113, f. 191 v, both dated 14 November 1641: Grima, "The Maintenance," p. 150.

⁹⁹ AOM 116, f. 222v; AOM 227, f. 370r; both dated 4 May 1649: Grima, "The Maintenance," p. 151.

¹⁰⁰ AOM 112, f. 38v, 25 May 1637; AOM 257, f. 85r, 8 November 1641; AOM 257, f. 161r, 29 (i.e. ultimo) February 1644; AOM 256, ff. 214v-215r, 24 April 1645: Grima, "The Maintenance," p. 151.

¹⁰¹ AOM 115, f. 32v, 26 April 1645: Grima, "The Maintenance," p. 151.

¹⁰² AOM 116, ff. 26r-27r, 13 June 1647; AOM 227, f. 370 r, 14 June 1647: Grima, "The Maintenance," p. 151.

¹⁰³ AOM 116, ff. 47v-48v, 6 September 1647: Grima, "The Maintenance," p. 151.

¹⁰⁴ AOM 112, f. 38r, 25 May 1637: Grima, "The Maintenance," p. 152.

¹⁰⁵ AOM 112, f. 38r, 25 May 1637: Grima, "The Maintenance," p. 152.

¹⁰⁶ And did not relieve the Grandmaster Lascaris of the burden even after his request in April 1648 AOM 116, ff. 64v-65v, 21 November 1647: Grima, "The Maintenance," p. 152.

¹⁰⁷ AOM 737, ff. 87r-88v; AOM 738, ff. 2r-4r: Grima, "The Maintenance," p. 152.

¹⁰⁸ AOM 737, ff. 89r; AOM 738, ff. 4v-5r: Grima, "The Maintenance," p. 152. Painting involved supplies of red paint, red lead, verdigris, white lead, varnish and oil. Boatswains were to be provided with enough supplies of tallow for smearing the galleys. The vessels were to be so treated once annually with the use of fire.

¹⁰⁹ AOM 737 ff. 89v-90r; AOM 738, f. 6r: Grima, "The Maintenance," p. 153.

¹¹⁰ AOM 738, f. 90r-v: Grima, "The Maintenance," p. 153.

¹¹¹ Archives of the Superior Courts of Justice, Magna Curia Castellaniae Officium Venerandae Seniscalliae, Vol. 3, not paginated, case Josepho Sacco vs. Ignatio Ribera, 11 July 1644 to 9 November 1645: Grima, "The Maintenance," p. 153.

¹¹² NAV, 759/1, Deeds of Notary Gio Domenico Debono: Grima, "The Maintenance," p. 154.

¹¹³ Grima, "Galley Replacements," pp. 55-56; George Percy Badger, *Description of Malta and Gozo* (Malta, 1838), p. 213.

¹¹⁴ AOM 1680, *Trattato del Tesoro*, pp. 584-85: in Grima, "Galley Replacements," p. 60.

¹¹⁵ The reason for the longer service required on the sailing ships may be due to the fact that it required longer time to master the operation of the more complicated rig.

¹¹⁶ AOM 1760 no. 11 f. 158: Wismayer, *The Fleet of the Order*, p. 17.

¹¹⁷ Bono, "Naval Exploits," p. 383. For detailed information about the crew members and their tasks see Wismayer, *The Fleet of the Order*, pp. 17-21.

¹¹⁸ Bono, "Naval Exploits," p. 384; Jurien de la Graviere mentions that the crew on a Maltese galley was 500 and 600.

¹¹⁹ The list of the crew engaged on the *San Giovanni* for the campaign of 1769-70 reveals that the majority of the surnames were Maltese including the clerks, surgeons, helmsmen, pilots, gunners, carpenters and others: Bono, "Naval Exploits," p. 384.

¹²⁰ In 1604, the Gente di Capo on the *Capitana* amounted to 160 men. In 1618 the number was increased to 180 men, and 190 in 1625. Normal galley: 1604, 150 men, 160 in 1618. Joseph F. Grima, "Gente di Capo on the Galleys of the Order in the First Half of the Seventeenth Century," *Hyphen* 2.2 (1979), pp. 52.

¹²¹ Wismayer, *The Fleet of the Order*, p. 16.

¹²² There were 30 officer knights on a *Capitana* and 25 on a normal galley: Wismayer, *The Fleet of the Order*, p. 17.

¹²³ German knights were exempted from these conditions: Wismayer, *The Fleet of the Order*, p. 16.

¹²⁴ Engel says that the position is assigned for three years: Claire Éliane Engel, *L'Ordre de Malte en Méditerranée, 1530-1798* (Monaco, 1957), p. 145. But Petiet and Brockman mention that the position was held for two years: Claude Petiet, *Des Chevaliers de Rhodes aux Chevaliers de Malte: Villiers de l'Isle-Adam* (Paris, 1994), p. 77; Eric Brockman, *Last Bastion: Sketches of the Maltese Islands* (London, 1961), p. 161. Both sources give the price in French francs, and no equivalent of the currency is provided. All we understand is that it was a high price and it was hard to afford to pay this sum.

¹²⁵ In fact he was known as the *ufficiale di manovra*

¹²⁶ Wismayer, *The Fleet of the Order*, p. 17.

¹²⁷ Wismayer, *The Fleet of the Order*, p. 17.

¹²⁸ Wismayer, *The Fleet of the Order*, p. 18.

¹²⁹ Agozzino had to deposit 1,000 *scudi* as guarantee, called *pleggeria* with the treasury to make good for the cost of escaping slaves. AOM 1759 f. 384: Wismayer, *The Fleet of the Order*, p. 19.

¹³⁰ NLM 223: Wismayer, *The Fleet of the Order*, p. 19.

¹³¹ AOM 1759 f. 428.

¹³² Wismayer, *The Fleet of the Order*, p. 19.

¹³³ Wismayer, *The Fleet of the Order*, p. 20.

¹³⁴ Godfrey Wettinger, "The Galley-Convicts and *Buonavoglia* in Malta During the Rule of the Order," *Journal of the Faculty of Arts of the University of Malta* 3.1 (1965), 29-37; Anthony T. Luttrell, "Malta and Rhodes: Hospitallers and islanders," in *Hospitaller Malta 1530-1798: Studies on Early Modern Malta and the Order of Saint John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), p. 270; Bono, "Naval Exploits," p. 386; Wismayer, *The Fleet of the Order*, pp. 9, 209-210; and Muscat, *The Maltese Galley*, pp. 25-26.

¹³⁵ Bono, "Naval Exploits," p. 386.

¹³⁶ Muscat, *The Maltese Galley*, p. 25.

¹³⁷ AOM 1934 A *passim*.

¹³⁸ The reduced number of the crew and armament were the reasons for the low operation and maintenance costs for the short galley.

¹³⁹ AOM 1934A ff. 13,14v, 15, 15v, 18; AOM 274 f. 209v; Muscat, "The Warships of the Order," pp. 103-04.

¹⁴⁰ Ettore Rossi, *Storia della Marina dell' Ordine di S. Giovanni di Gerusalemme di Rodi e di Malta* (Rome, 1926), p. 82.

¹⁴¹ Joseph Muscat, *The Maltese Vaxxell: The Third Rates of the Order of Saint John 1700-1798* (1999, Malta), p.1.

¹⁴² Mori Ubaldino Ubaldini, *La marina del Sovrano militare ordine di San Giovanni di Gerusalemme, di Rodi e di Malta* (Rome, 1971), p. 427; Rossi, *Storia della Marina*, p. 82.

¹⁴³ Abbé de Vertot, *The History of the Knights Hospitallers of Saint John of Jerusalem* (1757; repr. Malta, 1981), 2:103.

¹⁴⁴ Muscat, *The Maltese Vaxxell*, p. 4; Rossi, *Storia della Marina*, p. 82; Ubaldini, *La marina*, p. 472.

¹⁴⁵ Muscat, *The Maltese Vaxxell*, p. 4.

¹⁴⁶ A document dated October 8, 1700 was preserved in the archives (AOM 1771 ff. 153-154). This is a report written by Captain-General Spinola to the Grand Master (Ramon Perellos y Roccaful) describing the capture of *Beneghem* by a squadron of four galleys under his command.

In this document it is mentioned that the crew of the ship were 155 men. According to Vertot's account some 57 years later, the number of crew on board the *Sultana Binghen* is 300. If the ship had 80 guns, Vertot's figures seem more likely: Vertot, *The History of the Knights*, 2:104.

¹⁴⁷ Rossi, *Storia della Marina*, p. 83; Ubaldini, *La marina*, p. 474; Vertot, *The History of the Knights*, 2:104. Wettinger mentions that this ship was re-named as *San Giovanni I* but does not mention the source of this information. Therefore, it is probably his own opinion: Joseph M. Wismayer, *The Fleet of the Order of Saint John 1530-1798* (Malta, 1997), p. 50.

¹⁴⁸ NLM AOM 1928 ff. 1-22; NLM 262 ff. 19, 20; Joseph Muscat, "The Warships of the Order of Saint John 1530-1798," in *The Malta Historical Society Proceedings of History Week 1994*, ed. Stanley Fiorini (Malta, 1996), p. 99.

¹⁴⁹ Muscat, *The Maltese Vaxxell*, p. 4.

¹⁵⁰ NLM AOM 1928 ff. 1-22; NLM 262 ff. 19, 20; Muscat, "The Warships of the Order," p. 99; Wismayer, *Fleet of the Order*, p. 232.

¹⁵¹ Those ties are reflected in a pair of manuscripts on ship construction and marine terminology excerpted from French originals and kept today in the National Library in Malta: Anon. "Del nuovo dizionario della Marina della Sacra Religione da un ufficiale cavaliere che serve sugli vascelli," NLM 223; Fra Costantino Chigi, trans., "Libro di Marina, 1727," NLM 318. In general, see Alain Blondy, "Malta and France 1789-1798: The Art of Communicating a Crisis," in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of St John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), pp. 659-85.

¹⁵² Muscat, *The Maltese Vaxxell*, p. 5.

¹⁵³ Eric Rieth, "Les débuts de l'enseignement à l'École de Construction de Toulon: le livre de Construction des Vaisseaux (1683) de Francois Coulomb (1654-1717)," in *Navi di Legno: Evoluzione tecnica e sviluppo della cantieristica nel Mediterraneo dal XVI secolo a oggi*, ed. Mario Marzari (Trieste, 1998), p. 111.

¹⁵⁴ Rieth, "Les débuts de l'enseignement," pp. 112-13.

¹⁵⁵ Muscat, "Arsenali Maltesi," p. 198.

¹⁵⁶ NLM plan no 156 shows this new arsenal; Muscat, "The Warships of the Order," p. 99.

¹⁵⁷ Muscat, *The Maltese Vaxxell*, p. 6.

¹⁵⁸ NLM Lib. 262 f. 20; Muscat, "The Warships of the Order," p. 99.

¹⁵⁹ Muscat, "Arsenali Maltesi," p. 198.

¹⁶⁰ In this paper a number was assigned to each of these ships to identify the *San Giovanni* being mentioned.

¹⁶¹ Daniel Panzac, “La paix armée en Méditerranée: les flottes de guerre vers 1736-1739,” in *Méditerranée, Mer Ouverte*, ed., Christiane Villain-Gandossi, Louis Durteste and Salvino Busuttil, Actes du Colloque de Marseille (21-23 septembre 1995) I: 87. Panzac also provides an Appendix with the names, rates, and the crew numbers for each of these ships pp. 102-07. For specific references for the sources of this information see Daniel Panzac, “La paix armée en Méditerranée: les flottes de guerre vers 1736-1739,” in *Méditerranée, Mer Ouverte*, ed. Christiane Villain-Gandossi, Louis Durteste and Salvino Busuttil, Actes du Colloque de Marseille (Malta, 1997), 1: 87.

Notes to Chapter XI

¹ Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II* (New York, 1973), p. 850.

² Victor Mallia-Milanes, “Introduction to Hospitaller Malta,” in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of Saint John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), p. 5.

³ This ship served as the *padrone* (second in command) of the French fleet. NLM AOM 1759 f. 363, 365: Bartolomeo dal Pozzo, *Historia della sacra religione militare di S. Giovanni Gerosolimitano detta di Malta*, 4 vols. (Verona, 1703-1715), 1:686, 718; Ubaldino Mori Ubaldini, *La marina del Sovrano militare ordine di San Giovanni di Gerusalemme, di Rodi e di Malta* (Rome, 1971), p. 347 (construction), p. 354 (fighting at La Rochelle).

⁴ *Responsions* is the term used to describe the income from the European estates, the *commanderies*. For the escorting duties of the fleet, see AOM 1771 f. 83v: Joseph Muscat, “The Warships of the Order of Saint John 1530-1798,” in Stanley Fiorini ed., *The Malta Historical Society Proceedings of History Week 1994* (Malta, 1996), p. 82.

⁵ Robert von Dauber and Antonio Spada, *The Navy of the Sovereign Military Order of Malta* (Brescia, 1992), p. 103.

⁶ Barras de la Penne was the first commander of the Royal galley squadron of France. His letter dated 1725 was published in 1727 and is titled “*Nouvelles decouvertes sur la guerre, &c. avec des remarques critiques sur les trois nouveaux systemes des triremes, ou vaisseaux de guerre des anciens*,” published also by Jan Fennis: Jan Fennis, *Trésor du langage des galères: dictionnaire exhaustif, avec une introduction, des dessins originaux de René Burlet et des planches de Jean-Antoine de Barras de la Penne, un relevé onomasiologique et une bibliographie*, 3 vols. (Tubingen, 1995).

⁷ Dauber and Spada, *The Navy*, p. 104.

⁸ Peter Earle, *Corsairs of Malta and Barbary* (London, 1970), p. 105.

⁹ According to Mallia-Milanes the unusually violent pillage of Modon was a message from the Order to the Ottomans. Grandmaster L'Isle-Adam swore before leaving Rhodes that "he and his Knights would never again fight Suleyman." The sack of Modon represents the break of this solemn oath and indicates that the fight would continue: Victor Mallia-Milanes, *Venice and Hospitaller Malta 1530-1798* (Malta, 1992), p. 17.

¹⁰ There is no available information about the size of the Ottoman fleet but it must have been much larger than the four galleys of the Order, considering that the Ottoman fleet consisted of 200 ships at the time of the siege of Rhodes in 1523.

¹¹ Abbé de Vertot, *The History of the Knights of Malta* (1728; repr. Malta, 1989), 2: 9.46-50; Iacomo Bosio, *Histoire des Chevaliers de L'Ordre de S. Jean de Hiervsalem*, trans. Pierre de Boissat (Paris, 1643), 10.9.298; Ettore Rossi, *Storia della marina dell'ordine di San Giovanni di Gerusalemme di Rodi e di Malta* (Rome, 1926), p. 36; Ubaldino Mori Ubaldini, *La marina del Sovrano militare ordine di San Giovanni di Gerusalemme, di Rodi e di Malta* (Rome, 1970), pp. 134-37.

¹² P. Falcone, "Una Relazione di Malta sulla fine del Cinquecento," *Archivio storico di Malta* 4.1 (1933), 22. On some occasions Knights attacking Christian ships in the Adriatic were seized, beheaded and their ships were burnt by the Venetians: Mallia-Milanes, *Venice and Hospitaller Malta*, p. 18.

¹³ Vertot, *The History of the Knights*, 2:60-61.

¹⁴ 75 Knights and 400 soldiers died at Algiers. The papal fleet lost 15 galleys and 86 vessels in less than half an hour during a storm on the day of the fighting: Vertot, *The History of the Knights*, 2:86-90

¹⁵ Victor Mallia-Milanes, "Introduction to Hospitaller Malta," in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of Saint John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), p. 9; for the construction works that followed, see Quentin Hughes, *Malta: A Guide to the Fortifications* (Valletta, 1993).

¹⁶ Bosio mentions the problems related to the fortress in Tripoli giving a detailed description of the events leading to its loss: Bosio, *Histoire des Chevaliers de L'Ordre*, [books] 10-13. Specifically regarding the capture of Tripoli: Rossi, *Storia della marina*, p. 42; Salvatore Bono, "Naval Exploits and Privateering," in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of Saint John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), p. 354.

¹⁷ Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II*, 2 vols. (New York, 1972) 1: 136, 317, 467-68, 475.

¹⁸ John Francis Guilmartin, *Gunpowder and Galleys* (Oxford, 1974), p. 123.

¹⁹ The Venetian fleet consisted of 55 galleys and the total number of the Christian fleet was 130 galleys. Thus, when Venice was at peace with the Ottomans the remaining members of the alliance was too weak to encounter the Ottoman fleet of 90 galleys and 90 galliots. Venice only had the two large islands of the Mediterranean after this date, Cyprus and Crete: Guilmartin, *Gunpowder and Galleys*, pp. 42-57.

²⁰ Alberto Tenenti, *Piracy and the Decline of Venice, 1580-1615*, trans. Janet and Brian Pullan (London, 1967).

²¹ Bosio, *Histoire des Chevaliers de L'Ordre*, 407-33; Rossi, *Storia della marina*, pp. 45-46; Ubaldini, *La marina*, 202-6; Bono, "Naval Exploits," p. 355; Roger Charles Anderson, *Naval Wars in the Levant, 1559-1853* (Princeton, 1952), pp. 12-13.

²² Guilmartin, *Gunpowder and Galleys*, pp. 123-34.

²³ 'Porte' is a term used to refer to the government of the Ottoman Empire in European sources, and history books.

²⁴ Alexander H. deGroot, "The Ottoman Threat to Europe, 1571-1830: Historical Fact or Fancy?" in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of Saint John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), pp. 199-254.

²⁵ "The Genoese island of Chios, the fortress town of Szigeth in the southwest of Hungary, Tunis, the Venetian island of Cyprus, and Morocco each in turn bears visible witness to the audacious advance by the Ottomans in the decade or so after 1565. Though victorious over Islam, Hospitaller Malta had failed to break Turkish morale." Andrew C. Hess, *The Forgotten Frontier: A History of the Sixteenth-Century Ibero-African Frontier* (Chicago, 1978), pp. 84-90.

²⁶ DeGroot, "The Ottoman Threat," pp. 199-254.

²⁷ Mallia-Milanes, "Introduction to Hospitaller Malta," p. 11.

²⁸ Mallia-Milanes, "Introduction to Hospitaller Malta," p. 11.

²⁹ The rebellion by the Spanish Muslims was put down by King Philip II of Spain who also ordered the dispersal of the Muslims of Andalusia throughout Castile. Granada was depopulated and repopulated with Christian settlers.

³⁰ Bono, "Naval Exploits," p. 357.

³¹ Hess, *The Forgotten Frontier*, p. 90.

³² Hess, *The Forgotten Frontier*, p. 91.

³³ Bono, "Naval Exploits," p. 358.

³⁴ The strategy and the impact of the introduction of these protestant powers on the activities of the Order will be discussed in Chapter XI, section titled Corsair Operations.

³⁵ A document in the Ottoman State Archives [BBA MÜD (Mühimme Series of Registers) f. 212: *ferman* to Shaban Pasha of Algiers: Aziz Semih Ilter, *Şimalî Afrikada Türkler* (Istanbul, 1934-1937), 1: 181.

³⁶ In September 28, 1644 the Order's squadron captured an Ottoman galleon named *Sultana* near Rhodes. According to Order's historians, this ship was sailing from Constantinople to Alexandria and was carrying some women from the sultan's harem. Because the Knights took the prize to Crete in order to escape the escorting galleys, Venice blamed the Knights for having provoked Turkish aggression, and forced them to join the defense of the island. AOM 1771 ff. 133-34, in Joseph M. Wismayer, *The Fleet of the Order of Saint John 1530-1798* (Malta, 1997), pp. 54-59.

³⁷ The Order's squadron in fact continued capturing merchantmen around Rhodes during these years but the limited area in which they confined their activities, and the need to share the prizes with the Venetians decreased income throughout this period. For details see Appendix E. The sudden decrease in the number of prizes can be seen in the study of Quarantine registers. For numbers and statistical data see Dominic Cutajar, "The Malta Quarantine Shipping and Trade 1654-1694," in *Mid-Med Bank Limited. Report and Accounts 1987* (Malta, 1988), p. 38.

³⁸ Jonathan Irvine Israel, *Dutch Primacy in World Trade, 1585-1740* (Oxford, 1989), pp. 225-29.

³⁹ D.F. Allen, "The Order of Saint John and Cromwell's Navy 1649-1660," *The Mariner's Mirror* 79.2 (1993), 142.

⁴⁰ Bono, "Naval Exploits," p. 369; Rossi, *Storia della marina*, pp. 78-79.

⁴¹ Lib 466 ff. 1-212 (Francisco Messina's autobiography) in Wismayer, *The Fleet of the Order*, pp. 108-12.

⁴² This spectacle that was performed in Pozzuoli (near Naples), during which the crews of the galleys caught swans and conducted mock sea fighting. Lib 466 ff. 1-212 (Francisco Messina's autobiography) in Wismayer, *The Fleet of the Order*, p. 121.

⁴³ Claude Petiet, *Le roi et le grand maître. L'Ordre de Malte et la France au XVIIe siècle* (Paris, 2002), p. 119.

⁴⁴ AOM 1759 f. 223. Petiet includes a detailed discussion about the issue of right of search and certain problems with the impossible position of both sides. For seventeenth century correspondence between Grandmaster Lascaris, Cardinal Richelieu and Louis XIV on problems related to this issue, see Petiet, *Le roi et le grand maître*, pp. 119-38.

⁴⁵ Joseph Muscat, "The Warships of the Order of Saint John 1530-1798," in Stanley Fiorini ed., *The Malta Historical Society Proceedings of History Week 1994* (Malta, 1996), p. 81.

⁴⁶ Based on the court cases most Christian ships were searched and seized by the Hospitallers under the pretext of having Jewish merchants and Jewish goods on board. For several such instances see Victor Mallia-Milanes, *Venice and Hospitaller Malta 1530-1798* (Malta, 1992), pp. 37-63.

⁴⁷ John McManamon, "Maltese Seafaring in Medieval and Post-Medieval Times, 870-1798," forthcoming.

⁴⁸ Michel Fontenay, "The Mediterranean, 1500-1800: Social and Economic Perspectives," in *Hospitaller Malta, 1530-1798: Studies on Early Modern Malta and the Order of Saint John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), pp. 72-83.

⁴⁹ Xavier Labat Saint-Vincent, "La guerre de course et ses effets sur le commerce en Méditerranée au cours des guerres de sept and et d'indépendance Américaine: l'exemple de Malte," in *La guerre de course en Méditerranée (1515-1830)*, ed. Michel Vergé-Franceschi, Antoine-Marie Graziani and Jean-B Lantieri (Paris, 2000), p. 161.

⁵⁰ For a summary of the political and social developments leading to the increase of corsairing in the seventeenth and eighteenth centuries see, Peter Earle, *Corsairs of Malta and Barbary* (London, 1970), pp. 3-19.

⁵¹ Earle, *Corsairs of Malta*, p. 6.

⁵² Three of the members were Knights Grand Crosses from different *Langues*. The fourth member was a senior commander and the fifth was a lay doctor of law. NLM Lib. 152, 651 in Joseph Muscat, "The Maltese Corso," in *Méditerranée, Mer Ouverte*, ed. Christiane Villain-Gandossi, Louis Durteste and Salvino Busuttil, Actes du Colloque de Marseille (Malta, 1997), 1:195; for discussion regarding the institutions related to corsairing see also Mallia-Milanes, *Venice and Hospitaller Malta*, pp. 127-28.

⁵³ This court was set up in 1697 to try cases arising out of normal maritime commerce but became a parallel institution to *Tribunale degl'Armamenti*. The major goal here was to set up a lay court so that cases could not be appealed to Rome. But this act of defiance of papal authority was not overlooked and the regulations changed gradually: Earle, *Corsairs of Malta*, p. 115.

⁵⁴ Victor Mallia-Milanes, "Poised between hope and infinite despair: Venetians in the Port of XVIIIth century Malta," in *Méditerranée, Mer Ouverte*, ed. Christiane Villain-Gandossi, Louis Durteste and Salvino Busuttil, Actes du Colloque de Marseille (Malta, 1997), 1:228.

⁵⁵ The proposed area would generally be along the Barbary and Levantine coasts; Earle, *Corsairs of Malta*, pp. 124-25.

⁵⁶ Muscat, "The Maltese Corso," 1: 196-197.

⁵⁷ The regulations enforced after the establishment of the *Tribunale degli Armamenti* in 1605 clearly indicated that the owners and captains of the privateers were restrained from attacking “ships, merchandise, goods, and persons of Christians or of any other persons, even an infidel, who displays the safe-conduct of the Grand Master or of any other Christian Prince.” Earle, *Corsairs of Malta*, p. 108; Muscat, “The Maltese Corso,” 1:198.

⁵⁸ Muscat, “The Maltese Corso,” 1:198; Earle, *Corsairs of Malta*, pp. 125-30; Bono, “Naval Exploits,” 389-93; and Joseph M. Wismayer, *The Fleet of the Order of Saint John 1530-1798* (Malta, 1997), pp. 348-52. For details about the quarantine period and the quarantine practices in Malta see the section titled Quarantine Shipping in Chapter XI.

⁵⁹ Muslims of high social rank were also sold at high prices as the new owner would hope to get a greater ransom for that captive: Muscat, “The Maltese Corso,” 1:205.

⁶⁰ For detailed information about the slave prices and information about auctioning see Muscat, “The Maltese Corso,” 1:205. According to Muscat’s sources, the Treasury of the Order paid almost regularly the price of 137 *scudi* and 6 *tari* per slave.

⁶¹ There also were Christian slaves such as the Circassians and Georgians who were regarded as commercial objects. For detailed information about the treatment of slaves by the corsairs see Earle, *Corsairs of Malta*, pp. 72-94, and especially 80.

⁶² Muscat, “The Maltese Corso,” 1: 202

⁶³ John McManamon, “Maltese Seafaring.”

⁶⁴ In 1650 three French Knights seized an English ship with a cargo belonging to Maltese named Ignatio Ribera outside the Grand Harbor. Grandmaster Lascaris ordered them to return the ship to the English. This is an example of Order’s forces sometimes being involved in fighting between European powers and Catholic vs. Protestant fighting. AOM 1554, despatch of 28 May 1650, in D. F. Allen, “The Order of Saint John and Cromwell’s Navy 1649-1660,” *The Mariner’s Mirror* 79.2 (1993), 146.

⁶⁵ Earle, *Corsairs of Malta*, pp. 142-45; Mallia-Milanes, *Venice and Hospitaller Malta*, pp. 25-57; Bono, “Naval Exploits,” 389-91; Wismayer, *The Fleet of the Order*, p. 43.

⁶⁶ Michel Fontenay, “Les derniers deux du ‘corso’ chrétien à Malte (1679-1798),” in *Méditerranée, Mer Ouverte*, ed. Christiane Villain-Gandossi, Louis Durteste and Salvino Busuttil, Actes du Colloque de Marseille (Malta, 1997), 1:221-223.

⁶⁷ Mallia-Milanes, *Venice and Hospitaller Malta*, p. 125.

⁶⁸ Fontenay, “Les derniers deux,” 1:225.

⁶⁹ Dominic Cutajar, “The Malta Quarantine Shipping and Trade 1654-1694,” in *Mid-Med Bank Limited. Report and Accounts 1987* (Malta, 1988), p. 35.

⁷⁰ Cutajar, "The Malta Quarantine Shipping," p. 38.

⁷¹ Victor Mallia-Milanes, "From Valona to Crete: Veneto-Maltese Relations from the Late 1630s to the Outbreak of the Cretan War," in *Malta. A Case Study in International Cross-Currents*, ed. Stanley Fiorini and Victor Mallia-Milanes (Malta, 1991), pp. 159-73. For a much more detailed and comprehensive study of this subject, see Mallia-Milanes, *Venice and Hospitaller Malta*.

⁷² Venetians applied to Pope Urban VIII to "take immediate steps against the Order for what they claimed to be an irresponsible interruption of peaceful trade" following an incident in 1640. The correspondence regarding this issue consists of Urban VIII's brief *Allatum ad mos* in AOM 7, n. 64; AOM 257, f. 63; in Mallia-Milanes, "From Valona to Crete," p. 165; Bartolomeo dal Pozzo, *Historia della sacra religione militare di S. Giovanni Gerosolimitano detta di Malta*, 4 vols. (Verona, 1703-1715), p. 57.

⁷³ AOM 1212, ff. 18-19, 19 January 1642; AOM 257, ff. 116r-117r, 17 June 1642: Mallia-Milanes, "From Valona to Crete," pp. 166-67. Venetian *Stato da Mar* (literally, sea estates) included the Venetian ports, harbors, islands, and the waters around these locations.

⁷⁴ Several *sequestro* were issued when the Order was in Rhodes, but the frequency of such actions increased considerably after the arrival of the Order in Malta. Mallia-Milanes, *Venice and Hospitaller Malta*, p. 22; Mallia-Milanes, "From Valona to Crete," p. 170.

⁷⁵ Accounts for several different years were published by Mallia-Milanes: Mallia-Milanes, *Venice and Hospitaller Malta*, appendices I-IV.

⁷⁶ Mallia-Milanes, *Venice and Hospitaller Malta*, Appendix D.

⁷⁷ AOM 257, ff. 78v-79r, 14 May 1642: Mallia-Milanes, "From Valona to Crete," p. 169.

⁷⁸ There may have been many of such incidents, for by the beginning of the War of Crete (which was caused partly by the Order's piracy) all of the Order's properties in the Pirory of Venice were under *sequestro*: Mallia-Milanes, "From Valona to Crete," pp. 170, 173.

⁷⁹ For a few published examples and other cases see Mallia-Milanes, *Venice and Hospitaller Malta*, pp. 37-63.

⁸⁰ Mallia-Milanes, "Poised between Hope," 1:232.

⁸¹ For detailed accounts of these conflicts see Mallia-Milanes, *Venice and Hospitaller Malta*, pp. 65-98.

⁸² Mallia-Milanes, *Venice and Hospitaller Malta*, p. 107.

⁸³ Mallia-Milanes, *Venice and Hospitaller Malta*, p. 113.

⁸⁴ On one occasion, even before the Republic had had time to protest, the Grandmaster Wignacourt wrote a letter explaining that his corsairs were not involved in the attack on a ship named *Leon d'Oro* in 1607. Mallia-Milanes, *Venice and Hospitaller Malta*, pp. 129-30.

⁸⁵ Allen, "The Order of Saint John," p. 142.

⁸⁶ Fontenay, "Les derniers deux," 1:213.

⁸⁷ Fontenay, "Les derniers deux," 1:213.

⁸⁸ Fontenay, "Les derniers deux," 1:213. About the increasingly bad perception of corsair activities, see Labat Saint-Vincent, "La guerre de course," p. 164.

⁸⁹ Fontenay, "Les derniers deux," 1:213; Claire-Éliane Engel, *L'Ordre de Malte en Méditerranée, 1530-1798* (Monaco, 1957), p. 214. In this period there were many problems with the Order attacking Ottoman ships. An example of the instances when the King was personally involved in negotiating the return of the captured individuals or goods is a letter from Louis XIV to Cotoner asking the release of an old Turkish man called *Caracash*, see Petiet, *Le roi et le grand maître*, pp. 139-40.

⁹⁰ For problems between the Order and Versailles before this date see Petiet, *Le roi et le grand maître*, pp. 119-38.

⁹¹ France lost her grip on Mediterranean piracy as she had to fight the Nine Years' War against an alliance of the English, Spanish and Dutch. However after the major defeats of the French fleet in Barfleur and La Hogue, France turned to *guerre-de-course*.

⁹² Fontenay mentions that enormous folios in the French and the Maltese archives include letters regarding this issue. NLM 997, f. 27: Fontenay, "Les derniers deux," 1:214.

⁹³ There is not a single French name among the privateers operating from Malta after 1775. Fontenay, "Les derniers deux," 1:216, 221-223.

⁹⁴ French shipping and Barbary corsairs, as well as Francophile Knights of Malta, had been the intended targets of this English force in the Straits: Allen, "The Order of Saint John," p. 147.

⁹⁵ This move was based on the understanding of the fact that the viceroy of Sicily had the right of paramount domain over Malta, based on the feudal nexus between Order of Saint John and the Kingdom of Two Sicilies, which existed in consequence of the Emperor Charles V's circumscribed grant to the Order in 1530 of Tripoli and the Maltese Islands as a perpetual fief *cum imperio*. The feudal relationship of suzerain and vassal was expressed by the Order's annual dispatch on All Souls' Day of a falcon to the Emperor's viceroy in Sicily.

⁹⁶ Ms. 929 f. 178 29 June 1651: A. Mifsud, *Knights Hospitallers of the Ven. Tongue of England in Malta* (Malta, 1914), p. 247.

⁹⁷ For Lascaris' letter to Penn protesting the move AOM 1554, dispatch of 26 November 1651: Allen, "The Order of Saint John," p. 147.

⁹⁸ Mifsud, *Knights Hospitallers*, pp. 247-48.

⁹⁹ For the references to the correspondence regarding this issue between England and the Order see Mifsud, *Knights Hospitallers*, pp. 248-49.

¹⁰⁰ Mifsud mentions the incident but does not provide information regarding the resolution of the problem: Mifsud, *Knights Hospitallers*, pp. 249-51.

¹⁰¹ Otherwise the Order remained grateful for necessary commodities brought to Malta by English ships and the Order itself chartered English ships for coastal trading, a frequent example of which was the carrying of coal from Sicily to Malta. However, the affinity between England and Malta was obscured by Anglo-French rivalry in the Mediterranean. Since the Order had three *langues* of French brethren and there was no longer an English langue, French as well as Spanish influence in the Order was necessarily greater than English influence: Allen, "The Order of Saint John," pp. 150-51.

¹⁰² Jonathan Irvine Israel, *Dutch Primacy in World Trade, 1585-1740* (Oxford, 1989), pp. 225-29; Allen, "The Order of Saint John," pp. 148-49.

¹⁰³ For the correspondence between the King of France and the Grandmaster, see Royal Library of Malta, 270, *Liber Conciliorum*. Engel, *L'Ordre de Malte en Méditerranée*, pp. 215-16; Wismayer, *The Fleet of the Order*, p. 101.

¹⁰⁴ Most of the sources mention that this was a large sailing ship with 80 guns. Lib 466 ff. 1-212 (Francisco Messina's autobiography) and Alison Hoppen, "Military Priorities and Social Realities in the Early Modern Mediterranean: Malta and its Fortifications," in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of Saint John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), p. 400; Engel mentions that this was the *Capitana* of the Ottoman fleet. She might mean that this is the 'flagship' of the Ottoman navy, or if it was a 'capitana' than that would make the ship a galley. Since Engel does not provide a source for this information it is hard to rely on her information: Engel, *L'Ordre de Malte en Méditerranée*, p. 101.

¹⁰⁵ The same sources above tell the rest of the story as well.

¹⁰⁶ Cutajar, "The Malta Quarantine Shipping," pp. 38-39.

¹⁰⁷ Mallia-Milanes, *Venice and Hospitaller Malta*, p. 170.

¹⁰⁸ E. Cavaliero Roderic, "The Decline of the Maltese Corso in the XVIIIth Century. A Study in Maritime History," *Melita Historica* 2:4 (1959), pp. 224-38.

¹⁰⁹ Earle, *Corsairs of Malta*, p. 109.

¹¹⁰ Mallia-Milanes, *Venice and Hospitaller Malta*, p. 171-219.

¹¹¹ Engel, *L'Ordre de Malte en Méditerranée*, pp. 218-19.

¹¹² Fontenay, "Les derniers deux," 1:220.

¹¹³ Labat Saint-Vincent, "La guerre de course," pp. 163-65.

¹¹⁴ The word 'Barbary' refers to both the Atlantic and Mediterranean coasts of North Africa. However, most books and articles about the Mediterranean use the term for the corsairs who operated from the three North African regencies of Tunis, Tripoli and Algiers. For detailed information about the Barbary corsairs see Earle, *Corsairs of Malta*, pp. 23-46.

¹¹⁵ Fontenay, "Les derniers deux," 1:220. In the second half of the eighteenth century the activities were concentrated on Barbary shipping: Ubaldino Mori Ubaldini, *La marina del Sovrano militare ordine di San Giovanni di Gerusalemme, di Rodi e di Malta* (Rome, 1971), p. 494.

¹¹⁶ Engel, *L'Ordre de Malte en Méditerranée*, pp. 223-24.

¹¹⁷ The report mentions that between 1721 and 1726 the total of 19 Barbary corsair ships in existence captured 40 vessels and 900 men. The total value of these would have been about 8 million florins. The proposal suggests that the countries would contribute based on a rate fixed upon the value and number of their losses: Engel, *L'Ordre de Malte en Méditerranée*, pp. 223-24.

¹¹⁸ Engel, *L'Ordre de Malte en Méditerranée*, p. 224.

¹¹⁹ Engel mentions that this memoir is titled *Mémoire concernant les Régences Barbareques* was published in Venice in 1787, Engel, *L'Ordre de Malte en Méditerranée*, pp. 224-25. On the other hand, this high number is possibly an exaggeration to increase the above-mentioned proposal's chances of acceptance. It is also possible that Hénin-Liétard includes the very small boats in his count.

¹²⁰ Another document that dates to the very last years of the Order's rule in Malta (just before 1798) mention a proposal for a convoying system to protect the merchant ships based in Malta. According to this proposal the Order was to provide a sailing ship and a rowed frigate as escorts. Although the project was never realized, it indicates increased Barbary corsair activities threatening the Maltese cargo carriers and merchants: John DeBono, "The Protection of Maltese Shipping: A Late Eighteenth Century report," *Melita Historica* 8:3 (1982), 205-12.

¹²¹ This, according to Engel, reflects the weakness of the Order's forces: Engel, *L'Ordre de Malte en Méditerranée*, pp. 224-25.

¹²² Increasing trade and shipping naturally meant more entries in the Maltese harbors, and an increase in the income through harbor fees and quarantine services. These issues will be

discussed in Chapter XI, section titled Naval Training. For a summary of the number of ships entering the Maltese ports in the late eighteenth century see Labat Saint-Vincent, "La guerre de course," pp. 173-80.

¹²³ For a detailed study on the series of events and developments that led to the Napoleonic capture of Malta see Alain Blondy, "Malta and France 1789-1798: The Art of Communicating a Crisis," in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of St John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), pp. 659-85.

¹²⁴ Engel, *L'Ordre de Malte en Méditerranée*, p. 262.

¹²⁵ In addition to the properties in France, the Order also lost all territories that were under the occupation of revolutionary France: The Rhine, certain regions of Italian states and Belgium: Engel, *L'Ordre de Malte en Méditerranée*, pp. 264, 266; also see Mallia-Milanes, *Venice and Hospitaller Malta*, p. 271.

¹²⁶ This number is according to one estimation based on some numbers from 1690. Another estimate made in 1778 estimated the revenue as 1,748,992 livres. For more information and the archival sources for of the information here see Blondy, "Malta and France," pp. 661.

¹²⁷ Mallia-Milanes, *Venice and Hospitaller Malta*, p. 273.

¹²⁸ Mallia-Milanes, *Venice and Hospitaller Malta*, p. 273.

¹²⁹ Mallia-Milanes, *Venice and Hospitaller Malta*, p. 273.

¹³⁰ Brian W. Blouet, *The Story of Malta* (Malta, 1993), p. 129.

¹³¹ Mallia-Milanes, *Venice and Hospitaller Malta*, pp. 273-74.

¹³² Blondy, "Malta and France," pp. 662-63; Blouet, *The Story of Malta*, p. 130.

¹³³ Naples still had a basis to claim rights over Malta based on the initial agreement of Charles V and Villiers d'Isle Adam that enabled the Knights to settle in Malta in 1530.

¹³⁴ Mallia-Milanes, *Venice and Hospitaller Malta*, p. 278.

¹³⁵ See the correspondence regarding this issue published by Blondy, "Malta and France," pp. 674-84.

¹³⁶ Correspondence quoted in Blondy, "Malta and France," p. 682. See XII for further discussion in this issue.

¹³⁷ Françoise Perennes, "Chevaliers de Malta, provençaux et marins du Roi au XVIIe siècle," in *Méditerranée, Mer Ouverte*, ed. Christiane Villain-Gandossi, Louis Durteste and Salvino Busuttil, Actes du Colloque de Marseille (Malta, 1997), p. 171.

¹³⁸ Robert L. Dauber, "Knights of the Sovereign and Military, Religious and Hospitaller Order of Saint John of Jerusalem, of Rhodes and of Malta in the National Navies of Europe 1300-1600," in *Aspect and Actuality of Sea Power in the Mediterranean from XII to XVI Century*, ed. Paolo Alberini, Acta del Convegno di Storia Militare tenuto a Napoli (Rome, 1999), p. 212.

¹³⁹ Claire-Éliane Engel, *L'Ordre de Malte en Méditerranée, 1530-1798* (Monaco, 1957), p. 207.

¹⁴⁰ Dauber, "Knights of the Sovereign and Military," p. 212.

¹⁴¹ Perennes provides a full list of the Knights serving in the French Navy in the seventeenth century: Perennes, "Chevaliers de Malte," I: 175, 176-180.

¹⁴² Engel, *L'Ordre de Malte*, p. 207.

¹⁴³ Dauber, "Knights of the Sovereign and Military," p. 218.

¹⁴⁴ Robert L. Dauber, *Die Marine des Johanniter-Malteser-Ritter-Ordens* (Graz, 1989).

¹⁴⁵ Claude Petiet, *Le roi et le grand maître. L'Ordre de Malte et la France au XVIIe siècle* (Paris, 2002), pp. 247-592, especially 504-507.

¹⁴⁶ For information about the new training practices see Joseph Muscat, "The Warships of the Order of Saint John 1530-1798," *The Malta Historical Society Proceedings of History Week 1994*, ed. Stanley Fiorini (Malta, 1996), p. 79.

¹⁴⁷ Salvatore Bono, "Naval Exploits and Privateering," in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of Saint John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), p. 387.

¹⁴⁸ Engel, *L'Ordre de Malte*, p. 208; Bono, "Naval Exploits," p. 388; Ettore Rossi, *Storia della marina dell'Ordine di S. Giovanni di Gerusalemme di Rodi e di Malta* (Rome, 1926), pp. 108-17.

¹⁴⁹ Engel, *L'Ordre de Malte*, p. 207.

¹⁵⁰ The period of isolation was referred to as the period of purification (*purgazione*): Joseph Galea, "The Quarantine Service and the Lazzaretto of Malta," *Melita Historica* 4.3 (1966), 185.

¹⁵¹ According to Cutajar this was due to the fatalistic nature of the Muslim culture: Dominic Cutajar, "The Malta Quarantine Shipping and Trade 1654-1694," in *Mid-Med Bank Limited. Report and Accounts 1987* (Malta, 1988), p. 27.

¹⁵² Charles Savona-Ventura, "Medicine during the Modern Period in Malta," in *Outlines of Maltese Medical History* (Malta, 1997), pp. 25-34. For a summary of the hospital services see Claire Éliane Engel, *L'Ordre de Malte en Méditerranée, 1530-1798* (Monaco, 1957), pp. 157-64.

¹⁵³ There were smaller centers for women after 1625, but these closed down occasionally and for unknown durations of time: Savona-Ventura, "Medicine during the Modern Period."

¹⁵⁴ Galea, "The Quarantine Service," p. 186.

¹⁵⁵ This facility was also transferred to Valletta (beneath Saint Barbara bastion) by Grandmaster Parellos in the late seventeenth-early eighteenth century. There were a total of three hospitals in Malta by the end of the Order's rule: the hospital that dominated the port (bombarded in WWII), the women's hospital and the Lazaretto of quarantine on the Manoel Island: Engel, *L'Ordre de Malte*, p. 158.

¹⁵⁶ Cutajar, "The Malta Quarantine Shipping," p. 28. For a detailed study about the hospitals of Malta see Edgar Erskine Hume, *The Medical Works of the Knights of Malta* (Baltimore, 1940).

¹⁵⁷ NLM Arch. 6526 f. 45: Cutajar, "The Malta Quarantine Shipping," p. 23, 27. In 1643, an agreement was negotiated between the Cathedral of Mdina, the former owner of the island, and the Order. AOM 6535: Galea, "The Quarantine Service," p. 187. Fort Manoel was added in 1723 for the protection of the island: Galea, "The Quarantine Service," p. 186.

¹⁵⁸ John Howard, *An Account of the Principal Lazzarettos in Europe* (London, 1789); Galea, "The Quarantine Service," p. 191.

¹⁵⁹ Galea, "The Quarantine Service," p. 187.

¹⁶⁰ Provisions were delivered to the anchored ships by boats assigned by the guardians of health. If the master of such a ship wished to acquire a bill of health, he was directed to proceed to the *Lazzaretto* in Marsamxett harbor, where he unloaded his merchandise and afterwards remained anchored for the requisite period of quarantine: Galea, "The Quarantine Service," p. 190.

¹⁶¹ Earliest registers of the Maltese Quarantine Authorities are now gathered in one volume, NLM Archives 6526 covering the years from 1654-1694: Cutajar, "The Malta Quarantine Shipping," p. 23.

¹⁶² In some cases a *Doppia Quarentena* of 80 days was imposed: Cutajar, "The Malta Quarantine Shipping," p. 28; Galea, "The Quarantine Service," p. 191.

¹⁶³ Especially paper was considered a potential vehicle of contagion, letters from abroad were disinfected by dipping in vinegar or exposure to the fumes of burning straw and a mixture of manganese and sulphuric acid. Passengers and slaves were detained in the quarantine establishment to be exposed to 'smoking' from the burning of aromatic herbs: Savona-Ventura, "Medicine during the Modern Period." During the epidemic outbreaks, infected patients were also admitted into the wards of the hospital in Birgu: Galea, "The Quarantine Service," p. 186.

In some cases, infected ships were towed out to sea and destroyed with their cargo: Savona-Ventura, "Medicine during the Modern Period."

¹⁶⁴ Howard, *An Account of the Principal Lazzarettos*: Galea, "The Quarantine Service," p. 191.

¹⁶⁵ For examples of the galley squadron and its prizes undergoing quarantine, see Lib 466 ff. 1-212 (Francisco Messina's autobiography): Joseph M. Wismayer, *The Fleet of the Order of Saint John 1530-1798* (Malta, 1997), pp. 100-01, 104, 112.

¹⁶⁶ It is important to note that in the second half of the seventeenth century as much as 30 percent of all shipping entering quarantine quarters consisted of corsairing ships and their prizes: Cutajar, "The Malta Quarantine Shipping," p. 24.

¹⁶⁷ Black Death epidemics affected the island in 1501, 1519, 1523, 1575, 1592, 1623, 1655, and 1675; smallpox in 1680, 1763, 1769 and 1780; cholera in 1745, 1767, 1770, and 1783. For a detailed record of the epidemics during the seventeenth century, see Cutajar, "The Malta Quarantine Shipping," pp. 29-31, 65 Appendix D.

¹⁶⁸ For this reason the archival documents from Malta display a detailed and accurate account of all plague outbreaks around the Mediterranean in the seventeenth and eighteenth centuries. For a detailed list and maps showing the locations of plague outbreaks, see Cutajar, "The Malta Quarantine Shipping," pp. 33-35.

¹⁶⁹ All towers were armed with two swivel guns and sometimes with bronze cannons: Joseph Muscat, "Visitatio turrium: An official inspection of coastal towers," *Melita Historica* 8.2 (1981), 103, 105.

¹⁷⁰ Salvatore Bono, "Naval Exploits and Privateering," in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of Saint John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), p. 382. For the source of the comparative figures, see Table 9.

¹⁷¹ AOM 278, f. 130-133.

¹⁷² Xavier Labat Saint-Vincent, "La guerre de course et ses effets sur le commerce en Méditerranée au cours des guerres de sept and et d'indépendance Américaine: l'exemple de Malte," in *La guerre de course en Méditerranée (1515-1830)*, ed. Michel Vergé-Franceschi, Antoine-Marie Graziani and Jean-B Lantieri (Paris, 2000), p. 180.

¹⁷³ Engel, *L'Ordre de Malte*, p. 157.

¹⁷⁴ Galea, "The Quarantine Service," p. 198.

Notes to Chapter XII

¹ The population of the island (possibly including Gozo) was about 20,000 – 25,000 by 1530. For the figure of 20,000 see Victor Mallia-Milanes, “Introduction to Hospitaller Malta,” in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of Saint John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), p. 4. According to Carmel, this number was 25,000: Carmel Cassar, “Popular Perceptions and Values in Hospitaller Malta,” in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of Saint John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), p. 433.

² Sometimes the captured ships would not be in a condition to sail to Malta and only in those instances the prize would be sold in another location.

³ Mallia-Milanes, “Introduction to Hospitaller Malta,” p. 4.

⁴ For the functions of the *Università* after the arrival of the Order see Joseph Bezzina, “The Renaissance in the Late 16th Century,” <http://www.aboutmalta.com/gozo/bezzina1.html>

⁵ Alison Hoppen, “Military Priorities and Social Realities in the Early Modern Mediterranean: Malta and its Fortifications,” in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of Saint John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), p. 399.

⁶ Bezzina, “The Renaissance,” in <http://www.aboutmalta.com/gozo/bezzina1.html>

⁷ Alain Blondy, “Malta and France 1789-1798: The Art of Communicating a Crisis,” in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of St John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), pp. 661.

⁸ Alexander Bonnici, “Maltese Society under the Hospitallers in the light of Inquisition Documents,” in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of Saint John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), p. 312.

⁹ Godfrey Wettinger, “Early Maltese Popular Attitudes to the Government of the Order of Saint John,” *Melita Historica* 6.3 (1974), 255.

¹⁰ There was only one Maltese bishop during the period between 1530 and 1798: Bonnici, “Maltese Society,” pp. 313-14. For a detailed study of clergy in Malta during the period of the Knights, see Wettinger, “Early Maltese Popular Attitudes,” pp. 255-78.

¹¹ Bonnici, “Maltese Society,” pp. 313-14.

¹² Peter Earle, *Corsairs of Malta and Barbary* (London, 1970).

¹³ In 1551, during their second large-scale attack the North African corsair Dragut’s forces devastated the island of Gozo, capturing the majority of the population: According to some

sources, Gozo was depopulated during this attack: Iacomo Bosio, *Histoire des Chevaliers de L'Ordre de S. Jean de Hiervsalem*, trans. Pierre de Boissat (Paris, 1643), 13.2.375, 13.10.401; Ettore Rossi, *Storia della Marina dell'Ordine di S. Giovanni di Gerusalemme di Rodi e di Malta* (Rome, 1926), p. 42; Salvatore Bono, "Naval Exploits and Privateering," in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of Saint John of Jerusalem*, ed. Victor Mallia-Milanes (Malta, 1993), p. 354.

¹⁴ Landing of the Ottoman army in Marsascala for the Great Siege of 1565 with almost no resistance also shows how little the other parts of the island were protected.

¹⁵ Mallia-Milanes, "Introduction to Hospitaller Malta," p. 12.

¹⁶ In the autumn of 1565, the Order claimed that only a thousand men were available to clear the debris. AOM 430, ff. 267, 268v (5 January 1566). Eventually, the engineer in charge had to transport 500 men from Italy to continue work: Hoppen, "Military Priorities," pp. 404-05.

¹⁷ Mallia-Milanes, "Introduction to Hospitaller Malta," pp. 15, 19.

¹⁸ Brian Blouet, *The Story of Malta* (Malta, 1993), p. 95 table IV.

¹⁹ According to Mallia-Milanes' figures the population was 30,000 in ca 1574, 43,000 in 1617, 60,000 in 1650 and 80,000 in 1700: Victor Mallia-Milanes, *Venice and Hospitaller Malta 1530-1798* (Malta, 1992), pp. 4-5.

²⁰ Cassar, "Popular Perceptions," p. 433.

²¹ Foreign sailors serving on the Order's galleys sometimes married Maltese women and settled in local villages, two examples being Cesare Palumbo and Gabriele Alonso who married and settled at Luqa in 1617 and 1630 respectively: Joseph F. Grima, "*Gente di Capo* on the Galleys of the Order in the First Half of the Seventeenth Century," *Hyphen* 2.2 (1979), p. 52.

²² *Buonavoglia* served on the Order's rowing benches instead of escaping to more desperate conditions or in the hope of being freed of their debts: Bonnici, "Maltese Society," p. 329.

²³ These were condemned by the local tribunals to serve a sentence of detention on the oars: Bono, "Naval Exploits," p. 386.

²⁴ Bonnici, "Maltese Society," p. 329.

²⁵ For interesting cases of such exchanges, see Joseph M. Wismayer, *The Fleet of the Order of Saint John 1530-1798* (Malta, 1997), pp. 98-100.

²⁶ It must be emphasized that most of the carrying trade in Malta was left in the hands of local masters. The Order did operate a few merchant ships but in the majority of cases all business was left in the hands of local merchants: Joseph Muscat, "The Warships of the Order of Saint John

1530-1798,” in *The Malta Historical Society Proceedings of History Week 1994*, ed. Stanley Fiorini (Malta, 1996), p. 109.

²⁷ Bartolomeo dal Pozzo, *Historia della sacra religione militare di S. Giovanni Gerosolimitano detta di Malta*, 4 vols. (Verona, 1703-1715), II: 676.

²⁸ Joseph Muscat, *The Xprunara* (Malta, 1993).

²⁹ This rough estimate includes the Maltese corsairs but refers also to the number of Maltese employed on the galleys of the Order: Roderic E. Cavaliero, “The Decline of the Maltese Corso in the XVIIIth Century. A Study in Maritime History,” *Melita Historica* 2.4 (1959), p. 224.

³⁰ Mallia-Milanes, “Introduction to Hospitaller Malta,” p. 27.

³¹ According to a late eighteenth century report Malta’s trading partners were Sicily, Barcelona, Leghorn and Genoa. Every year about twelve ships took some three million *scudi* worth of cotton to Barcelona. These ships were escorted by the Order’s galleys: John Debono, “The Protection of Maltese Shipping: A Late Eighteenth Century Report,” *Melita Historica* 8.3 (1982), 205-212.

³² Carmel Vassallo, *Corsairing to Commerce. Maltese Merchants in XVII Century Spain* (Malta, 1997), p. 2.

³³ For a detailed analysis of such trade, see Carmel Vassallo, “The Brigantine Trade in XVIII Century Malta,” *Proceedings of History Week* (1993), 107-122.

³⁴ Vassallo, *Corsairing to Commerce*, p. 3.

³⁵ Bono, “Naval Exploits,” p. 385; Mallia-Milanes, “Introduction to Hospitaller Malta,” p. 19.

³⁶ Jean Quintin d’Autun, *The Earliest Description of Malta (Lyons 1536)*, trans. Horatio C.R. Vella (Malta, 1980), pp. 31, 40-41.

³⁷ Quintin, *The Earliest Description*, p. 40.

³⁸ For a list of other references including Jean Houel, Sier du Mont, and Agius de Soldanis see Cassar, “Popular Perceptions,” p. 450.

³⁹ P. Falcone, “Una relazione di Malta sulla fine del cinquecento,” *Archivio Storico di Malta* 4:1 (1933), 1-51; Mallia-Milanes, “Introduction to Hospitaller Malta,” p. 34.

⁴⁰ Falcone, “Una relazione,” p. 35.

⁴¹ G. Semprini, “Malta nella seconda metà del seicento (Da un manoscritto del tempo),” *Archivio Storico di Malta* 4: 2-4 (1933), pp. 97-112.

⁴² Bonnici, "Maltese Society," p. 327.

⁴³ Mallia-Milanes, *Venice and Hospitaller Malta*, p. 6.

⁴⁴ Bonnici, "Maltese Society," pp. 327-28.

⁴⁵ According to the numismatic data, the cost of 750 grams of bread in the seventeenth century was one *tari*, and a soldier's daily pay was about 4 *tari*. The information used here is from a source on the coins from the period of the Order of Saint John, www.degreeminiatures.com/castings/rcoins.html (consulted 23 December 2003). One person could buy 432 loaves of bread (weighing 750 grams each) per year.

⁴⁶ Peter Andrevich Tolstoi, *The Travel Diary of Peter Tolstoi: A Muscovite in Early Modern Europe*, trans. Max J. Okenfuss (DeKalb, Illinois, 1987), pp. 238-39.

⁴⁷ Giacomo Cappello, *Descrittione di Malta, Anno 1716* (1988, Malta).

⁴⁸ Bonnici, "Maltese Society," p. 311.

⁴⁹ Earle, *Corsairs of Malta*, p. 100.

⁵⁰ Jacques Léon Godechot, "La France et Malte au XVIIIe siècle," *Revue Historique* 206 (1951), p. 67.

⁵¹ Alain Blondy, "La France et Malte au XVIIIème siècle: le problème de la double nationalité," in *Malta. A Case Study in International Cross-Currents*, ed. Stanley Fiorini and Victor Mallia-Milanes (Malta, 1991), pp. 175-86; Alain Blondy, "Malta and France," p. 661.

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APPENDIX A

THE AMPHORA SCATTER

OFF THE ENTRANCE TO XLENDI BAY, GOZO

The entrance to the Xlendi Bay is obstructed by two shallow reefs and a very uneven coastal wind pattern that makes both anchorage and sailing difficult in this area. For this reason, ships abandoned anchors and jettisoned cargo to avoid wrecking. It seems that the amphoras and anchors around the reefs were all recovered by amateur divers in the 1960s. Some of these amphoras were brought to the archaeological museum in Gozo by divers from the British Navy who recovered this material from 20 meters of depth at the mouth of the Xlendi Bay. Interviews with the diving schools in Gozo suggest that further material was collected by divers in the last decades to clear all the remains in the areas up to a depth of 70 meters. Most of this material is likely in private homes and collections in Gozo and Malta, unless they were smuggled out of the country.

Our team began to survey this area in 2000 to explore the seabed beyond standard SCUBA diving limits. The use of mixed gases for SCUBA diving is prohibited in Malta. Thus, we were led to believe that any material beyond 70 meters would be untouched. The side scan sonar available for the 2000 season allowed us to explore the area up to a depth of 100 meters. Data collected during this survey provided further proof that the archaeological scatters continued in the 70-100 meters range, even though the distribution of possible targets did not immediately signal a typical shipwreck site.

Still, the targets identified during the 2000 survey required further surveying using equipment capable of reaching this depth. A Remotely Operated Vehicle (ROV) provided by the

Norwegian Institute of Technology (University of Trondheim) with a depth rating of 1,000 meters was brought to this area to accomplish this task in 2001. After only a few minutes of searching we detected a concentration of archaeological material, best described as an amphora field, rather than a pile. The field of scatter extends for about 400 meters and it is about 100 meters wide, and is at a depth of about 100-120 meters. The scatter is about three kilometers from the closest shore and is five to six kilometers off the entrance to Xlendi Bay. The amphora scatter is surrounded by a flat, featureless sand bottom for kilometers before reaching the shallow area – about 70 meters deep – where broken amphora fragments reappear.

It is difficult to determine the significance of this scatter and to determine whether or not it represents a shipwreck. As discussed below in detail, there are several different amphora types in Xlendi, and their dates range from the third century B.C. to the second century A.D. It is likely that the dangerous entrance to the bay caused many ships to sink in this area throughout history, but most ships might have capsized rather than sank. Subsequent disturbance of the scatter was caused by bottom-dredging nets used commonly by Gozitan fishermen.

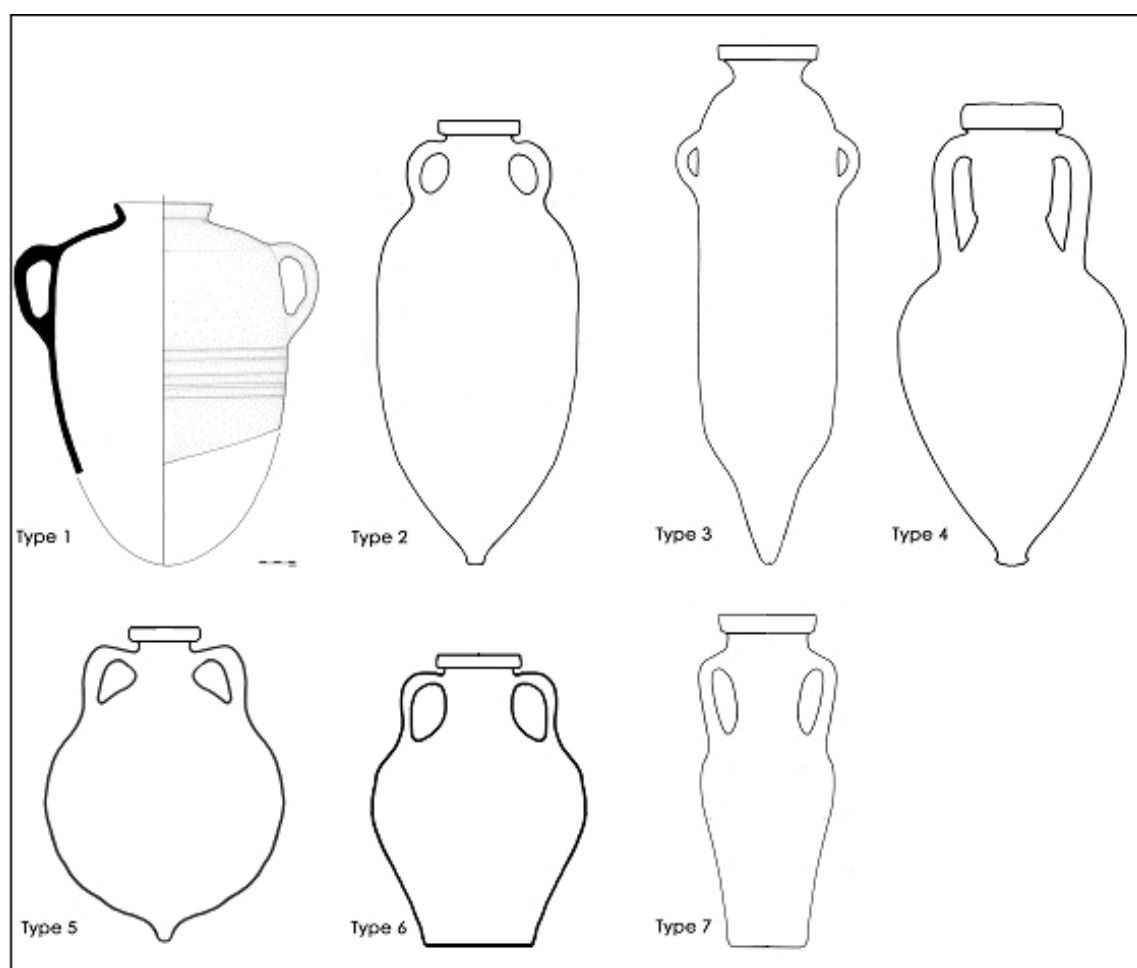


Fig. A.1. Main amphora types represented at the Xlendi site.

We were able to identify seven different amphora types represented on the Xlendi site (Fig. A.1, Table A.1). One of the major hurdles to overcome was the difficulty of acquiring precise dates for the amphoras, since the equipment and the time available in 2001 allowed for the retrieval of only one archaeological sample (Type 1 in Fig. A.1). According to Torres' typologies, this particular ovoid Punic amphora dates to the third century B.C., and is likely to be

the product of a workshop in western Sicily or in the vicinity of Carthage.¹ An example of a Type 1 amphora was selected for recovery because the majority of the amphoras on the scatter field are of this type. This type is classified as Roman type 2212 in Gonzalez's typology, and has a very wide distribution pattern in the Mediterranean, having been found at sites on the Atlantic coast of Spain, the Balearic Islands, near Carthage, and in Punic tombs on Malta.²

TABLE A.1.
Amphora parallels for the types represented at Xlendi site

Type	Bibliographical info	Page and table #	Typology	Date
Type 1	Joan Ramon Torres, <i>Las ánforas fenicio-púnicas del Mediterráneo central y occidental</i> (Barcelona, 1995)	Lamina IV no. 117 Figure 156 no.117 Figure 33 b	Type: T-3.2.1.2.	Third century B.C. (Before 250 B.C.)
	Pablo Vidal González, <i>La isla de Malta en época fenicia y púnica</i> , BAR International Series 653 (Oxford, 1996)	P. 84	Roman Type 2212	Third century B.C.
Type 2	Miguel Beltran Lloris, <i>Las ánforas romanas en España</i> , 2 vols. (Zaragoza 1970)	Vol. 2, p. 534, fig. 216	Keay LXIb	Fifth century A.D.
			Beltran 60	Fifth century A.D.
Type 3	Martin Sciallano and Patricia Sibella, <i>Amphores comment les identifier</i> (Aix-en-Provence, 1994)		Mana C 2c	110-80 B.C.
	D.P. Susan Peacock and David Franklyn Williams, <i>Amphorae and the Roman Economy</i> (London, 1986)	pp. 151-152	Class 32 "Neo Punic"; Mana Type C Form 3	Late third century B.C. – first century A.D.
	Víctor M Guerrero Ayuso and Blanca Roldán Bernal, <i>Cátalogo de las ánforas prerromanas</i> (Cartagena, 1992)		Mana C ½	Third century B.C.
	Joan Ramon Torres, <i>Las ánforas fenicio-púnicas del Mediterráneo central y occidental</i> (Barcelona, 1995)	205-205 Lamina IX 210	T-7.2.1.1.	Late third early second B.C.
	Anna Maria Bisi, Alessandra Caravale and Isabella Toffoletti, <i>Anfore antiche: conoscerle e identificarle</i> (Formello, 1997)	pp. 394-396 p. 58	Tripoli Mana C	Third century B.C. Fourth- second century B.C.
Type 4	Alessandra Caravale and Isabella Toffoletti,	p. 84	MGS II	Fifth-fourth

¹ Joan Ramon Torres, *Las ánforas fenicio-púnicas del Mediterráneo central y occidental* (Barcelona, 1995), type T-3.2.1.2.

² Pablo Vidal González, *La isla de Malta en época fenicia y púnica*, BAR International Series 653 (Oxford, 1996), p. 84.

<i>Anfore antiche: conoscerle e identificarle</i> (Formello, 1997)				century B.C. [Mainland Greece and Sicily]
Type 5	Miguel Beltrán Lloris, <i>Las ánforas romanas en España</i> (Zaragoza, 1970)	471 and 482	Dressel 20 Form (phase II)	V First century A.D.
	Martin Sciallano and Patricia Sibella, <i>Amphores comment les identifier</i> (Aix-en-Provence, 1994)			First-third century A.D.
Type 6	Miguel Beltrán Lloris, <i>Las ánforas romanas en España</i> (Zaragoza, 1970)	pp. 498 no 4 & p. 500	Type 7	First century A.D.

Another less common amphora type (Type 3) identified through examination of the ROV tapes from the Xlendi site is a form 3 of the Maná C type also dating to the same period as Type 1 (late third-second century B.C.). It is likely that this Punic type was produced in Tripolitania or in western Sicily. It is found in archaeological contexts in Spain, the Balearic Islands, Sardinia, Corsica, sites on the southern coast of modern France, on the Italian peninsula, and in Tunisia.³ Amphora type 4, with numerous examples on the site, is likely to be a product of Sicily between the fifth and the fourth centuries B.C.⁴ However, it is important to note that the visual examinations of the ROV tapes may be misleading, and Type 4's neck might have a slightly different form closer to Will's Type 1d, which dates to 180-150 B.C., a common form seen widely around the Mediterranean.⁵ In another publication, Will catalogued a similar amphora under type e, in her typology. Will's type e is a wine amphora common from the first

³ Martin Sciallano and Patricia Sibella, *Amphores comment les identifier* (Aix-en-Provence, 1994), type Mana C2c; D.P. Susan Peacock and David Franklyn Williams, *Amphorae and the Roman Economy* (London, 1986), type Mana C Form 3; Víctor M. Guerrero Ayuso and Blanca Roldán Bernal, *Cátalogo de las ánforas prerromanas* (Cartagena, 1992), type Mana C1/2; Torres, *Las ánforas*, type T-7.2.1.1; Alessandra Caravale and Isabella Toffoletti, *Anfore antiche: conoscerle e identificarle* (Formello, 1997), Mana C; Elizabeth Lyding Will, (personal communication – 2002), second century A.D.

⁴ Caravale and Toffoletti, *Anfore antiche*, type MGS II.

⁵ Elizabeth Lyding Will, "The Roman Amphoras," in Anna Marguerite McCann, Joanne Bourgeois, Elaine K Gazda, John Peter Oleson and Elizabeth Lyding Will, *The Roman Port and Fishery of Cosa: A Center of Ancient Trade* (Princeton, N.J., 1987), pp. 171-223.

half of the second century B.C. to the last half of the first century A.D., seen in contexts from Spain and France to central Italy, the Lipari Islands, Algeria, Carthage and the Aegean area.⁶ There is no doubt that Type 5 is a typical example of Dressel's Form 20. Dressel 20 was a transport container for olive oil used as early as the second quarter of the first century A.D. and as late as the fourth century A.D.⁷ The nature of our visual data does not allow us to see the stamps or inscriptions on the examples from the Xlendi site; therefore, it is not possible to determine the precise dating of this amphora type, for which detailed chronologies have been published.⁸

The other types of Xlendi amphoras are more problematic. The fact that we cannot closely inspect the original artifacts, except for the sample Type 1, means that the dating has to rely on somewhat fuzzy video images captured by the ROV, making it difficult to precisely date the site. Amphora typologies and dating may change drastically depending on small details that are impossible to identify unless the original artifact is accessible. However, it seems plausible that a number of types are more recent than the ones described above. Types 6 and 7 may date to the first or second century A.D. Type 6 bears similarities to Will's Type 18a that dates to the late first to late second century A.D.⁹ There are at least three other types seen in quantity on the site, unfortunately with no parallels in known typologies. They may either be local product of a workshop yet to be discovered, or they may have signs or details to help with their identification once raised in future seasons. At least two cooking pots and one pitcher were also observed, but

⁶ Elizabeth Lyding Will, "Greco-Italic Amphoras," *Hesperia* 51.3 (1982), 355.

⁷ Will, "The Roman Amphoras," p. 211.

⁸ Emilio Rodríguez Almeida, *Il Monte Testaccio: ambiente, storia, materiali* (Rome, 1984), pp. 151-233.

⁹ Will, "The Roman Amphoras," p. 210.

video images of these artifacts did not allow identification or dating (Fig. 9 in Chapter II). In either case, it is certain that it will be difficult to determine the nature of the site in its entirety before a detailed site map is produced and other archaeological samples are brought to the museum for study and analysis. However, it is important to note that this site is the first shipwreck site of such extent ever discovered in Malta. The importance of the study of the material lies in the insights it can provide into the history of Malta, specifically the dynamics of trade in the central Mediterranean during the time of the Punic Wars.

Recommendations for Future Work in Xlendi

A detailed archaeological study of the Xlendi site is necessary before we can confidently interpret its significance in Gozo and Malta's history during the Punic and Roman periods. Because the seabed is not completely flat in this area, a multi-beam sonar survey is required to determine the extent of the site and to map the seafloor. Acoustic images produced by a multi-beam sonar could be geographically positioned and processed to create a three-dimensional rendering of the site. Next, a sub-bottom profiler should be employed to determine the extent of the material below the seafloor. Simultaneously, the ROV could collect video footage required to produce a detailed photo-mosaic of the site to be superimposed on the multi-beam map. Once a detailed map of the site, with the amphora types indicated, is available, it will be possible to determine the concentration of contemporaneous amphoras and ceramic types, to determine the nature of the site in general. It is also essential to raise at least one representative example of each amphora type for accurate dating and petrographic analysis for provenancing purposes.

APPENDIX B

GRAN CARRACA DI RODI IN HISTORY AND ICONOGRAPHY

Description of the Textual Evidence Regarding the Carracks of the Order of Saint John

A number of historical documents from the sixteenth century and several paintings of later dates indicate that the Order of Saint John had at least two carracks around the time they lost their base in Rhodes, and migrated to Malta. The historic events of this period are discussed in detail in Chapter IX, and the importance of the period between 1523 and 1530 lies in the fact that the Order almost did not survive the loss of Rhodes. For this reason, both the heroic defense of Rhodes, the difficult years during which the Order struggled for survival and the arrival of this first group to Malta are events of great historical importance for Hospitaller chroniclers. The large barges and the carracks were loaded with the people and goods of the Order after their expulsion from Rhodes. Because of the length of this journey, these ships acquired a certain symbolic importance and survived in iconography and historiography for several centuries, representing not only the hardships experienced by the Knights during these years, but also the endurance displayed by these warriors that contributed to survival of the Order.

Contemporary accounts of these events were provided by Giacomo Bosio, the historian and the agent of the Order of Saint John in the Roman Court at the time. Bosio was personally involved in the events and his accounts constitute the major source of information regarding the sailing ships employed by the Order of Saint John during the decades before and after the

journey from Rhodes to Malta.¹ There are a few other primary sources that are not contemporary with the events, such as “*the history of the grand priors and the priory of Saint Gilles*,” written by the archivist of the priory, M. Jean Raybaud in the second decade of the eighteenth century.² Another historical account by Abbé de Vertot also includes a few indirect references to the ships.³

Textual evidence regarding the large sailing ships of the fleet can be grouped under four categories: (1) information concerning the large sailing ships in general without reference to specific vessel types, (2) information concerning the carracks without details concerning the specific features of the ship, (3) information concerning the carrack *Santa Maria*, and, (3) information about the carrack *Sant’ Anna*.

Sailing Ships of the Order and the Carracks

Raybaud mentions that Brother Jacques Sarriet, the commander of the ships and the captain of the *Grand Carrack*, was in the port of Aiguesmortes in 1487 loading various merchandise onboard the ship, presumably, to be shipped to Rhodes.⁴ Unfortunately, the name of the ship was not specified in this particular account. Bosio’s earliest reference to the *Gran*

¹ This three-volume history of the Order of Saint John was written between 1594-1602. Iacomo Bosio, *Histoire des Chevaliers de L’Ordre de S. Jean de Hierusalem* (Paris, 1643).

² It is a two volumes work and the first volume covers the history of the Hospitaller Order of Saint Jean of Jerusalem from its origins to the middle of the fifteenth century. The first volume includes the history of 52 grand priors of Saint Gilles, beginning with brother Durand in 1101 and ending with brother Jean Romieu de Cavaillon in 1449. The second volume begins with the history of brother Raimond Richard who became in charge in 19 October 1449 and covers 41 grand priors including that of brother Joseph-Francois de Piolenc in 1751. Jean François Raybaud, *Histoire des Grand Prieurs et du prieure de Saint Gilles* (Nimes, 1905), pp. 3-4.

³ Abbé de Vertot, *Histoire des chevaliers de Saint-Jean-de-Jérusalem, appelés depuis chevaliers de Rhodes, et aujourd’hui chevaliers de Malte* (Paris, 1778).

⁴ Raybaud, *Histoire des Grand Prieurs*, p. 35.

Nave di Rodi dates to 1498.⁵ In this passage, the ship is mentioned as part of the preparations for an attack against the Ottomans, which was delayed until 1501. *Gran nave* possibly served as a transport vessel in this expedition as the galleys formed the main fighting force and the Grandmaster left Rhodes on his *Capitana* – a galley.

The second reference to the “carrack of Rhodes” mentions its capture of a ship described as the ‘gran nave’ and named *Magrebina* in 1507.⁶ Brockman mentions that the carrack that captured *Magrebina* is the oldest on record and is named *St. John Baptist*⁷, or *San Giovanni Battista*.⁸ The *Magrebina* issue is complicated because we have no primary evidence about *Magrebina* being re-named. Curiously, the general belief among the modern historians is that *Magrebina* must have been re-named *Santa Maria*.⁹ The major reason for this speculation is the absence of references to the construction of *Santa Maria*. Therefore, because *Magrebina*’s capture and *Santa Maria*’s launching dates roughly correspond it has been assumed that they are the same ship.

⁵ Bosio, *Histoire des Chevaliers*

⁶ Joseph Muscat, *The Carrack of the Order* (Malta, 2000), p.10.

⁷ Brockman also mentions that *Magrebina* was a carrack and he states that it was re-named as *Santa Maria*. As usual, Brockman does not give any references as to the source of this information Eric Brockman, *Last Bastion* (London, 1961), p. 165.

⁸ Muscat, *The Carrack*, p. 10.

⁹ Muscat, *The Carrack*, p. 10. Petiet also mentions that the *Santa Maria* was captured from the Egyptians in 1507 and the ship was first re-named as *Notre-Dame* and than as *Santa Maria*. As usual Petiet does not provide any references as to the source of this information. Claude Petiet, *L’Ordre de Malte face aux Turcs* (Paris, 1996), p. 68; Joseph M. Wismayer, *The Fleet of the Order of Saint John 1530-1798* (Malta, 1997), p. 5.

Santa Maria

The first written evidence to identify the Carrack of Rhodes as the *Santa Maria* dates to 1523, when the Knights fled Rhodes after its fall to the Turks. In this passage, Bosio refers to *Santa Maria* as ‘the carrack of Rhodes’ clearly as “la Gran Nave, *Santa Maria*, detta volgarmente la Carracca di Rodi” (The Great Ship, *Santa Maria*, popularly known as the Carrack of Rhodes). The same year, the Grand Master ordered the captain of *Santa Maria*, Pietro de Credenys, to sail to Villefranche to accompany the new carrack *Sant’ Anna*. In this account dating to 1523, Bosio began referring to *Santa Maria* as “the old carrack” and describes the new carrack as the “largest and most stupendous vessel that the Mediterranean had ever seen.” It was loaded with the “possessions and the treasure” when the Order arrived at Malta. In October 20, 1530 *Santa Maria* was hit by a hurricane while at anchor in the harbor, broke free and drifted across the harbor running aground on the other side.¹⁰ From this date onwards, there is no account of this ship’s activities and it was decommissioned shortly after the incident, although the contemporary accounts mention that it was not seriously damaged during the storm.

The end of *Santa Maria* came when it was employed as a slave prison for those captured from the siege of Modone. In October 5, 1531, a slave woman set the ship on fire causing the magazine to explode. Although all the officers on board miraculously survived, the loaded cannon still aboard, sparked by the flames, discharged within the confines of the harbor. Ultimately, cannon from Fort Saint Angelo fired at the ship and sank it near the Chapel of Saint Julian, in modern-day Dockyard Creek. According to Bosio’s account, both the artillery and “the Order’s treasure” were salvaged.¹¹

¹⁰ Bosio, *Dell’Istoria* III: 88D

¹¹ Bosio, *Dell’Istoria* III: 108.

The major discrepancy of this account is that it has the treasury and Order's slaves kept on board a decommissioned ship that still carried ammunition even though it was anchored in the harbor since 1530. Other accounts from this period indicate that the Grandmaster was lodged in the *Castrum Maris*, in Birgu, and it is unlikely that the treasury was kept on board the carrack.

Sant' Anna

Sant' Anna was built in Nice and was launched "on the very day" the Turks took Rhodes¹² (December 18, 1522). *Sant' Anna*'s first recorded sea voyage dates to May 1531,¹³ when it encountered a squadron of 25 Muslim vessels near Favignana while sailing from Malta to Toulon. The Muslim squadron under the command of Barbarossa consisted of 13 galleys and galleasses. The captain of the carrack, Toucheboeuf hoisted the flags and pennants and fired the cannons into the Muslim fleet causing the corsairs to quickly retreat to their base. Bosio's account of the amphibious action against Coron on the Morea peninsula provides information about the crew capacity of the ship in 1532. Still under the command of Toucheboeuf, *Sant' Anna* ferried 100 Knights and 120 soldiers in addition to its usual crew of 500.¹⁴ *Sant' Anna* was employed as a transport ship during the sack of the small coastal town of Modon on the Peloponessos.¹⁵

¹² Bosio, *Dell'Istoria* III: 22B

¹³ Bosio, *Dell'Istoria* III: 99 E.

¹⁴ Bosio, *Dell'Istoria* III: 113E

¹⁵ Jaime Salva, *La Orden de Malta y las acciones Navales Españolas contra Turcos y Berbericos en los siglos XVI y XVII* (Madrid, 1944), p. 96.

Information About the Design of the Hull and the Rig

“... The Grand Carrack was much larger than *Grimaldi*, which carried 14,000 salme of grain, measurement of Sicily. She had four decks above water and two under the water, which were sheathed with lead sheathing attached with bronze pins that made the hull as strong as if it was made out of iron, so that cannons of an entire army could not sink her. There was a chapel, an armory where the weapons of 500 men were kept, a hall, a chamber, and an antechamber for the Grandmaster and the Council, a dining hall, an officers’ quarter, a blacksmith’s quarter with separate galleries to work brass and copper and there were flowers in large pots around the stern deck. There was no need to empty the bilge water as there was not even a drop of water in that area. She carried 50 large artillery pieces and a large quantity of smaller ones. The main mast was so large that six men could barely embrace it. She was very fast and very light and was decorated with paintings and streamers.”¹⁶

Thus, according to Bosio’s description, this particular carrack, which is very likely to have been *Sant’ Anna*, had a capacity of about 2,500 tons.¹⁷ This calculation would either make *Sant’ Anna* larger than ships such as the *Henry Grace a Dieu* (built in 1514, 1000-1500 tons) or the *Grand François* (wrecked in 1533, 1500-2000 tons), or would suggest that Bosio gives an inflated number. Bosio also seems to exaggerate the function of the lead sheathing, as this is usually a measure taken against wood-boring marine life from penetrating the hull as opposed to protect the ship from being damaged by ordnance. It is clear that lead is not a strong enough metal to protect the wooden hull against cannon balls.¹⁸

¹⁶ Bosio, *Histoire des Chevaliers*, 11. 9. 332.

¹⁷ One Sicilian salme of wheat equals 6.4 U.S. bushels and based on the assumption that the wheat carried by *Sant’ Anna* in the sixteenth century Mediterranean would have the same grain size and weight as the modern American wheat the above calculation can be made. For conversions and calculations see John Edward Dotson, *Freight Rates and Shipping Practices in the Medieval Mediterranean* (1969, Ph.D. dissertation, Johns Hopkins University), pp. 103, 302-05.

¹⁸ This sentence in Bosio’s description has led many generations of maritime historians to suggest that the Order of Saint John had an “armored ship” in the sixteenth century. For such statements see Eric Brockman, *Last Bastion* (London, 1961), p. 165; Wismayer, *The Fleet*, p. 5.

Remarks

The carracks of the Order were also depicted on several late sixteenth and the seventeenth century paintings, generally titled as *Gran Caraca di Rodi*. The majority of these paintings represent a large vessel carrying the Order's flag, and are likely to be the copies from a seventeenth century painting based on their stylistic similarities. The mere existence of these paintings and the survival of the myth of the *Gran Caraca di Rodi* in the historical and iconographical record in the seventeenth century show the importance attributed to this ship that appears as the symbol of the Order's power and longevity.

APPENDIX C

RECONSTRUCTION OF AN EIGHTEENTH-CENTURY THIRD RATE SHIP OF THE MILITARY ORDER OF SAINT JOHN: *SAN GIOVANNI BATTISTA* OF 64 GUNS

San Giovanni Battista of 64 guns served as the flagship of the men-of-war squadron of the Order of Saint John between 1718 and 1765. This relatively long period of commission was characterized by successful undertakings against the Barbary corsairs. It was also a period when the number of ships forming the squadron was relatively high (see Table 13 in Chapter X).

San Giovanni, built by a French shipwright in Malta and displays common features of French ships of this period, as well as similarities to other ships built by the Order. Therefore, a detailed study of this particular ship provides insights to the shipbuilding and rigging practices in Malta during the last century of Order's rule.

A number of manuscripts that included information about the dimensions and construction features of this ship were preserved in the archives of Malta and Lucca, Italy. Also, *San Giovanni* and other contemporary ships were depicted on contemporary paintings which provide additional information for the reconstruction of the hull and the rigging of the ship.

The local shipwrights who built ships after the departure of the French shipwrights in 1726 were all trained by the Coulombs who designed and oversaw the construction of six third rates for the Order (see Table 14 in Chapter X). Therefore, it is likely that *San Giovanni* exhibits characteristics common to many ships in the Order's men-of-war squadron.

Historical Evidence

The renowned French shipwright Blaise Coulomb and his two sons stayed in Malta during the period between 1717 and 1727 to oversee shipbuilding activities in the shipyards and to train local shipwrights on ship design and construction. According to contemporary records¹ the first ship to be designed and built in Malta by the Coulombs was *San Giovanni Battista*.²

TABLE C.1.
Measurements of San Giovanni³

Measurements	French feet	English feet	Meters
Length of Keel on Land	116	124.12	37.83
Extension of Stem	20	21.4	6.52
Extension of Stern	6	6.42	1.96
Length from Stem to Sternpost	142	151.94	46.31
Height of Sternpost	27' 7"	29.51	9.00
Height of Stem	28	29.96	9.13
Depth of Hold	18	19.26	5.87
Maximum Beam at the waterline level	39' 4"	42.08	12.83
Maximum Beam on Deck (Tumble-home)	29' 8"	31.74	9.68
Maximum width at the highest point on poop	17' 9"	18.99	5.79
Maximum width of quarterdeck	18' 9"	20.06	6.12
Draught at stern	12' 6"	13.37	4.08
Draught at the stem	8	8.56	2.61

¹ National Library of Malta [NLM], 318 f. 201.

² Joseph Wismayer, *Fleet of the Order of St. John, 1530-1798* (Malta, 1997), p. 286; Joseph Muscat, "Arsenali Maltesi dal seicento all 'ottocento," in *Navi di Legno: evoluzione tecnica e sviluppo della cantieristica nel Mediterraneo dal XVI secolo a oggi*, ed. Mario Marzari (Trieste, 1998), p. 198.

³ Wismayer, *The Fleet*, p. 286. The formula used here for the conversion from French foot to English foot is: 1 French foot = 1.07 English foot; Formula for the metric conversion: English foot x 12 x 2.54.

The keel of the 64-gun *San Giovanni Battista* was laid down on September 1, 1717, and the ship was launched on April 16, 1718.⁴ The general dimensions of the hull (Table C.1), the mast and spar dimensions (Table C.2) and the rigging of *San Giovanni Battista* were recorded in two contemporary documents. The first document, preserved in the Malta Archives, was published by Wismayer (Fig. 25 in Chapter X).⁵ The second document was found in the archives of the city of Lucca.⁶ The document is titled as “Stato della nave San Giovanni Comandante”⁷ and was also published by Scarabelli.⁸

TABLE C.2.
Measurements of the rigging elements

Measurements	French feet	English feet	Meters
Mainmast	96	102.72	31.31
Foremast	84' 6"	90.41	27.56
Jib-boom	55	58.85	17.94
Mizzen Mast	66.5	71.15	21.69
Maintop Mast	59' 8"	63.84	19.46
Foretop Mast	53' 6"	57.24	17.45
Mizzen-top	36	38.52	11.74
Main-topgallant Mast	25' 6"	27.28	8.32
Fore-topgallant Mast	22' 9"	24.34	7.42
Spritsail Mast	16	17.12	5.22

⁴ NLM 318 f. 200 and *Libro di Marina* 1727.

⁵ Wismayer, *The Fleet*, pp. 286, 290.

⁶ Salvatore Bongi and Domenico Corsi eds., *Inventario del R. Archivio di Stato in Lucca* (Lucca, 1800-1899), 1: 7.

⁷ ASL [Archivio di Stato in Lucca] 292 f. 48 and 49.

⁸ Giovanni Scarabelli, *La squadra dei vascelli dell'Ordine di Malta agli inizi del Settecento* (Taranto, 1997), p.39.

Unfortunately, these documents provide little information about the running rigging and the sails of the vessel. The only references to the rigging and sails of *San Giovanni* are found in financial documents that stated that the main topsail of *San Giovanni* cost the treasury 462 *scudi*.⁹ The sail was made of 56 canvas panels and it cost eight *scudi* three *tari* to sew each panel, at five stitches to the inch using palm, needle and tallow-wax. Each seam had to be doubled to provide extra strength to the sail. Most of the rigging elements were manufactured in Fort Ricassoli, while the guns, anchors and most of the iron fittings were forged at the Order's *Ferreria*, also known as the *Fianco* in Valletta.¹⁰

Iconographic Evidence

There are a number of paintings depicting the men-of-war of the Order in action. Unfortunately, most of these paintings were made at later times to commemorate an important encounter of the past. However, they provide valuable information especially in cases where they are in accordance with the historic and textual evidence. A summary of the iconographic evidence concerning *San Giovanni* is provided on Table C.3.

⁹ AOM [Archives of the Order in Malta] 1899 f. 157.

¹⁰ Wismayer, *The Fleet*, p. 290.

TABLE C.3.

Iconographic sources consulted for the reconstruction of *San Giovanni Battista*

Original name of the painting	English translation	Features seen on the painting	Comments
Presa del Sole d'Oro d'Algiers fatta dell'Acque d'Orano dalla Nave S. Giovanni sotto il Comando del Venerando Balio Langon-Terente Generale – li 20 Aprile 1721	The S. Giovanni capturing the Sole D'Oro of Algiers in April 1721.	Bow, bowsprit, fore, main and mizzen masts and rigging, marines on deck. The stern of the vessel is obscured by the other ship and the gunfire.	The ship does not have the bowsprit topmast, and represents different rigging and construction features than the ones described in contemporary texts and archival documents.
Presa della Padrona di Tunisi detta la Rosa Fatta dell'Acque di Morea dall' Comandatore Fra Francesco Castell S. Pierre Primo Comandante della squadra li 3 Maggio dell' 1706	The Tunisian Fleet's Capitana is captured, thanks to the action of commander Francesco Castell S. Pierre (1706)	The general rig of the ship is clearly visible except for the spritsail and the bow. There are three Maltese ships on the painting in addition to two Muslim ships. Painting was especially useful for the reconstruction of the braces.	Spritsail does not have a topmast and this feature does not agree with the contemporary archival document.
Presa della Padrona di Tripoli fatta nell'acque tra la Pantelleria e Barbaria dalla nave S. Vincenzo fatta dal Cavaliere fra Giacomo Francesca de Chambray essendo Corruna il commana Fra Andrea de Grille li 13 Maggio 1723.	The S. Vincenzo sinks Tripoli's capitana (flagship) in the waters between Pantelleria and Barbary (May 13 th , 1723)	The San Vincenzo is clearly visible with all its rigging details: stays, braces, shrouds and sails.	San Vincenzo is a smaller ship than the San Giovanni, and is possibly a frigate carrying 50 guns. However, its rig is very similar to San Giovanni as depicted in its archival records. Thus this painting provided good information about the reconstruction of the rig.
	The ship commanding the Order's Squadron of sailing ships at the time of fra' Emanuele de Rohan (1775-1797).	Masts, topmasts, and topgallants, shrouds, stays, braces. In addition, the stern decorations are very clearly visible and the stern decorations on the drawing were based on this painting.	Although this is a slightly later ship this painting provides details that are missing or not as clear in other paintings.
	Detail of a painting from the 18 th century. Archive of the Order of Saint John in Rome	Stern of <i>San Giovanni</i>	Consulted for the stern decorations on the drawing
	Detail of a painting from the 18 th century. Archive of the Order of Saint John in Rome	Bow of <i>San Giovanni</i>	Consulted for the figurehead on the drawing.

Contemporary Documents Consulted for the Reconstruction of *San Giovanni Battista*

A series of references were consulted for the reconstruction of the ship and its rigging. The major references for the specific ship *San Giovanni Battista* were the general dimensions for the ship's hull and its masts provided by Wismayer. However, none of the textual and iconographic primary sources were complete, and the reconstruction of the hull and the rig was largely based on contemporary French vessels of similar sizes. Table C.4 provides a detailed analysis of the specific features of the hull that were compiled from these sources.

TABLE C.4.
Sources consulted for the reconstruction of the hull

Name, date and specifications of the ship	Source of information	Comments
Third rate ship designed by Coulomb fils (son) – date unknown	Paris, <i>Souvenirs de Marine</i> , Vol. 3, no. 269	Bowsprit attachment, stern deck, height of the stern, aft part of the vessel, and rudder.
<i>Dauphin Royal</i> – 64 guns – 1736	László and Woodman, <i>The Story of Sail</i> , p. 108.	Curve of the bow, quarter rails.
Album de Colbert Plate 37	Colbert, <i>Album de Colbert</i> , pl. 37	Rudder, rudder attachments, fore deck.
<i>L'Athenienne</i> – 64 gun - 1798	Gardiner, <i>Warships of the Napoleonic era</i> , p. 107	Gunports (spacing etc), general form of the bow.
<i>Le Protecteur</i> – 64 guns - 1755	László and Woodman, <i>The Story of Sail</i> , p. 109.	Stern, the height of the stern and the back deck etc. The bow extension and the placement of the figurehead.
Drawing of an unidentified ship from the Malta archives Lib. 139 f. 208 dated 1729	Wismayer, <i>Fleet of the Order</i> .	Form of the hull, bow ornaments, rails, height of the stern deck, bowsprit topmast attachment. Mast-spar arrangement.

During the reconstruction process, a number of other sources were also consulted as general references to determine the specific conventions used in the representation of certain rigging features. For example, although Nelson's *Victory* is a larger ship built in the British tradition in 1765, Longridge's drawings were very useful as general references (Plan no. 6 HMS

Victory Standing Rigging and Plan no 7 HMS *Victory* Running Rigging).¹¹ Similarly, Archibald's *The Wooden Fighting Ship in the Royal Navy* (Archibald 1968) was a helpful reference as it contained rigging profiles for ships that had similar arrangements similar to *San Giovanni*.¹²

References Consulted for the Reconstruction of Specific Features of the Hull and the Rigging

1) M. Bouguer, *Traité Du Navire: De Sa Construction, Et De Ses Mouvements*

The majority of the measurements required to reconstruct the masts and spars of *San Giovanni* were based on information provided by M. Bouguer, *Traité du navire: de sa construction, et de ses mouvements*.¹³ This is a French treatise that provides detailed information about the construction of contemporary men-of-war in French shipyards. Section II of the fifth chapter of the first book was especially useful as it contained detailed explanations and formulas to calculate the thickness and length of the masts and spars.

Bouguer positioned the mainmast "...at the middle of the total length of the vessel – from the top of the sternpost to the top of the stempost..." The position of the foremast is described as the 1/40th or 1/50th of the length of the vessel. The bowsprit is placed at a 35° angle

¹¹ Charles Nepean Longridge and Edward Bowness, *The Anatomy of Nelson's Ships* (Annapolis, Md., 1981).

¹² Edward H. H. Archibald and Ray Woodward, *The Wooden Fighting Ship in the Royal Navy, A.D. 897-1860* (London, 1968), p. 39.

¹³ M. Bouguer, *Traité du navire: de sa construction, et de ses mouvements* (Paris, 1746).

with the horizon (waterline) and the mizzenmast is positioned at $3/16^{\text{th}}$ of the total length of the vessel forward of the stern.¹⁴

The formulas presented in the treatise, the calculations and the final measurements applied on the reconstruction are presented in Table C.5. Placement of the masts following the rules presented by Bouguer matched almost perfectly all other contemporary ship drawings consulted for the reconstruction (Table C.6).

TABLE C.5.

Measurements used for the reconstruction of San Giovanni Battista.

All references are from M. Bouguer, *Traité du navire: de sa construction, et de ses mouvements* (Paris, 1746).

Rigging element	Formula	Reference from Book I, Section II, Chapter V.	Formula for the Diameter
Main mast (Grand voile)	2.5 x midship frame	p. 123.	1/40 of its length (top deck level) $\frac{2}{3}$ of its maximum end thickness
Maintop mast (Le grand hunier)	1/5 of the midship frame	p. 124	1/43 of its length $\frac{1}{3}$ of the maximum thickness at the ends
Topgallant mast (Le grand perroquet)	5/12 of the maintop mast	p. 124	$\frac{1}{2}$ of the maintop mast
Fore mast (la mizzaine)	Midship frame x 2 $\frac{1}{4}$	p. 123	1/39 of its length (first deck level)
Fore top mast (le petit hunier)	Midship frame + $\frac{3}{8}$ of the midship frame	p. 124	1/43 of its length
Fore topgallant mast (le petit perroquet)	4/7 of the midship frame	p. 124	$\frac{1}{2}$ of the fore top mast $\frac{1}{3}$ of the maximum thickness at the ends
Bowsprit mast (voile de baupre)	Midship frame x 1.5	p. 123	1/27 of its length 26 $\frac{1}{3}$ <i>pieds</i> as <i>pouces</i>
Bowsprit topsail mast	2/5 of the midship frame	p. 124	1/25 of its length
Mizzen mast (artimon)	Midship frame + $\frac{3}{4}$ of the midship frame	p. 124	$\frac{7}{16}$ of the midship frame in <i>pieds</i> as <i>pouces</i> . $\frac{1}{2}$ of its diameter on the bottom
Mizzen top mast (perroquet de fougue)	$\frac{1}{2}$ of the maintop mast	p. 124	$\frac{1}{2}$ of the maintop mast

¹⁴ Bouguer, *Traité du navire*, pp. 120-22.

All conversions from the French Royal Feet (*Pied du Roi*) into metric measurements were made following the values presented in Ross' *Archaeological Metrology*.¹⁵ In summary one Royal Foot (*Pied du Roi*) equals 32.484 cm during the period between 1668 and 1840, while an inch (*pouce*) is 2.707 cm.

TABLE C.6.
Sources consulted for the reconstruction of rigging details.

Rigging element	Reference	Comments
Braces	Marquardt, <i>Eighteenth-Century</i> , p. 101 fig. 55b	This was the only reference book with detailed information for the braces of continental ships of this period.
Mizzen lateen yard	Marquardt, <i>Eighteenth-Century</i> , p. 82 Lever, <i>The Young Sea Officer's</i> , p. 42 Lever, <i>The Young Sea Officer's</i> , p. 33	
Mainyard	Boudriot, <i>The Seventy-Four</i> Victoria, <i>Álbum del Marqués</i> . Lever, <i>The Young Sea Officer's</i> , p. 39	Especially the lifts.
Foreyard	Boudriot, <i>The Seventy-Four</i> Victoria, <i>Álbum del Marqués</i> .	Especially the lifts.
Topgallant yard	Marquardt, <i>Eighteenth-Century</i> , p. 99 Victoria, <i>Álbum del Marqués</i> .	Especially the lifts.
Spritsail yard	Marquardt, <i>Eighteenth-Century</i> , p. 54 Lever, <i>The Young Sea Officer's</i> , p. 41	
Stay collar	Boudriot, <i>The Seventy-Four</i> , p. 105 fig. 264	
Bumpkin stays	Boudriot, <i>The Seventy-Four</i> , p. 127 fig. 280	Only one of the stays was applied to the drawing as the San Giovanni is a smaller ship.
Rigging to the yards	Boudriot, <i>The Seventy-Four</i> , pp. 164-165, fig. 298	Showing the detailed assembly of the lower yard, topsail yard and topgallant yard both for the mainmast and the foremast.
Rigging to the yards of the mizzen mast	Boudriot, <i>The Seventy-Four</i> , p. 168-169, fig. 299	Only the parts that matched with the depictions on the iconographic material.
Bowsprit topmast, topsail, and topyard	László and Woodman, <i>The Story of Sail</i> , p. 107 <i>Le Fendant</i>	A third rate of the Lois XIVs fleet, built in 1701 (60 guns). The only example with a similar rig to San Giovanni.
Parrals	Victoria, <i>Álbum del Marqués</i> .	Especially the parrals of the mainmast and their relation to the woodings.

¹⁵ Lester A. Ross, *Archaeological Metrology: English, French, American, and Canadian Systems of Weights and Measures for North American Historical Archaeology* (Ottawa, 1983), p. 77.

2) J. Boudriot, *The Seventy-Four Gun Ship*

Another very useful source especially for the reconstruction of the rigging was *The Seventy-Four Gun Ship* by Boudriot.¹⁶ His figure illustrating the bowsprit standing rigging was consulted for the reconstruction of the bowsprit.¹⁷ His plates of the mainmast (L), foremast and mizzenmast (L1) and close up view of the pendants and shrouds above the mainmast (figure 281 on page 130) were especially useful for the reconstruction of the standing rigging.¹⁸ The drawings on figures 287 (shrouds and catharpins), 288 (backstays), 289 (stays and preventer-stays) were used (along with the iconographic evidence) to reconstruct the standing rigging of *San Giovanni*. Other details that were reconstructed based on the information presented by Boudriot are summarized in Table C.6 above.

3) Additional Sources

The major sources consulted for almost every feature on the drawing were Lever's *The Young Sea Officer's Sheet Anchor*¹⁹ and *Eighteenth-Century Rigs & Rigging* by Marquardt.²⁰ The latter was especially important as it is the only source that contained information about the arrangement of the braces on continental ships during the early eighteenth century that could be

¹⁶ Jean Boudriot, *The Seventy-Four Gun Ship: A Practical Treatise on the Art of Naval Architecture* (Annapolis, Md., 1987).

¹⁷ Boudriot, *The Seventy-Four Gun Ship*, fig. 280.

¹⁸ Boudriot, *The Seventy-Four Gun Ship*, fig. 280. See figure L for the mainmast, (L1) for the foremast and mizzenmast, and the close up view of the pendants and shrouds above the mainmast on figure 281 on page 130.

¹⁹ Darcy Lever, *The Young Sea Officer's Sheet Anchor, or, A key to the leading of rigging, and to practical seamanship* (Mineola, NY., 1998).

²⁰ Karl Heinz Marquardt, *Eighteenth-Century Rigs & Rigging* (Cedarburg, Wis., 1992).

used for the reconstruction in accordance with the paintings of *San Giovanni* and textual evidence.²¹ For the specific features reconstructed based on these two sources see Table C.6.

When the French captured Malta in 1798 the fourth *San Giovanni* was in the final stages of construction. It was completed by the French, but was never able to escape the British blockade, and thus became a British prize when Valletta surrendered in 1800. As a 64-gun ship of average dimensions, the ship was not very valuable to the royal navy, but was pressed into service during the pre-Trafalgar panic, and operated in the Mediterranean until being wrecked off Sicily in October 1806. A drawing of this ship is preserved in Greenwich (DR 7260) and was published by Gardiner.²² The drawing was consulted to reconstruct specific features of the hull along with contemporary drawings of other ships of the approximately similar sizes.

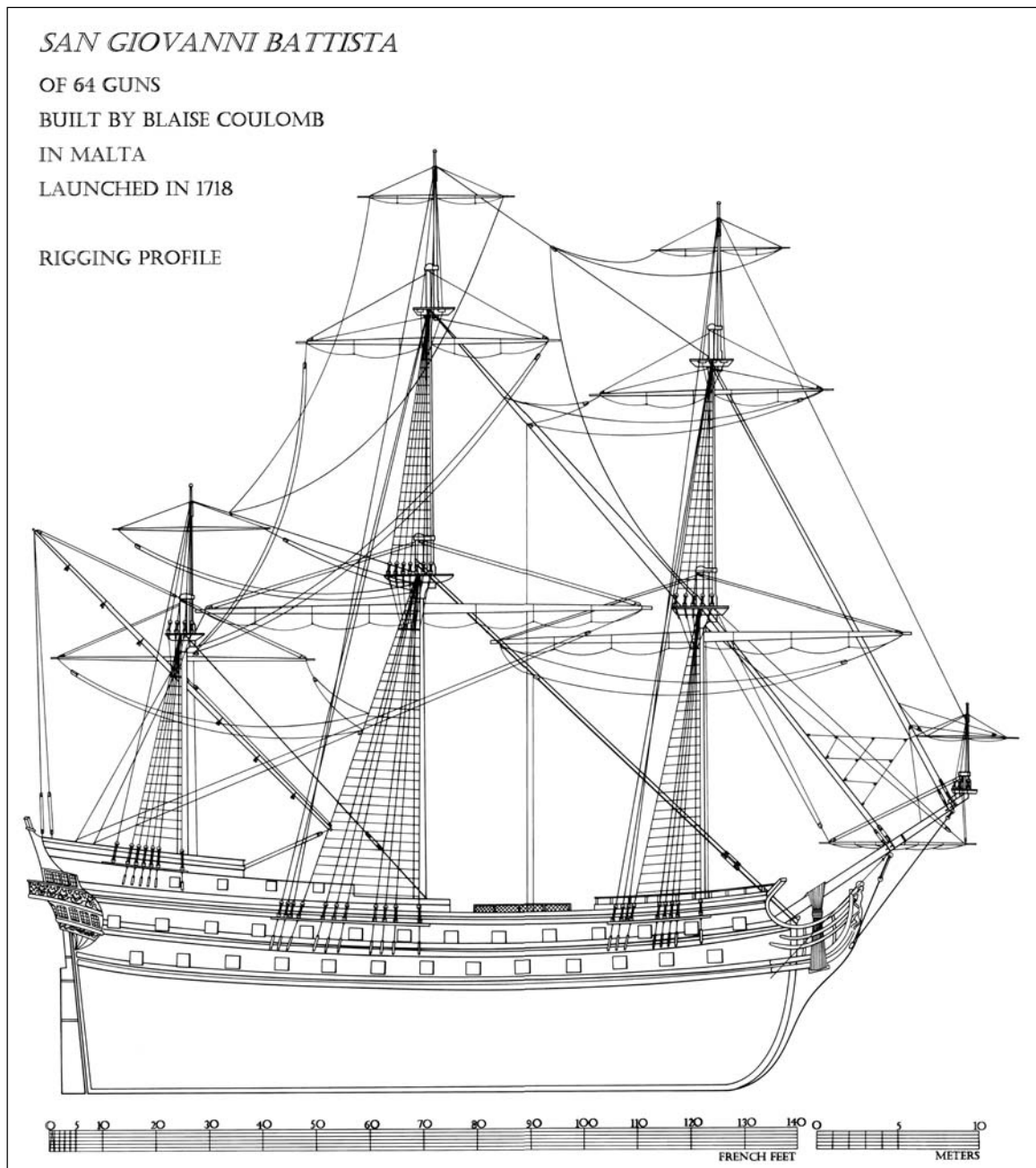
Le Fendant was a 60-gun ship built in 1701 and was a third rate of Louis XIV's fleet which did not have a mizzen topgallant mast.²³ Details of the topgallant braces illustrated by László and Woodman were useful for the reconstruction of this particular rigging feature.

²¹ Marquardt, *Eighteenth-Century*, fig. 55b.

²² Robert Gardiner, *Warships of the Napoleonic era* (Annapolis, Md., 1999) pp. 106-07.

²³ Veres László and Richard Woodman, *The Story of Sail* (Annapolis, Md., 1999), p. 107.

Finally, the treatise *Álbum del Marqués de la Victoria* (Folio 43) was consulted for the reconstruction of certain features such as the doubling of the masts, and the attachments of the yards.



APPENDIX D

EXCAVATION IN THE MARSAMXETT HARBOR NEAR THE QUARANTINE HOSPITAL

Background Information

The two large and well-protected harbors of Malta, Marsamxett and Grand Harbor are located to the north and to the south of Valletta, the capital of Malta, respectively. Manoel Island is at the middle of the Marsamxett harbor and is today connected to land by a small bridge. The island was the quarantine center of Europe for nearly two centuries and it is likely that it was settled before the Knights period of Malta. Because most of the island was overbuilt, no archaeological survey has ever been conducted on Manoel Island or around the Marsamxett Harbor. The emergence of a development project that included the construction of a yacht marina to the west of Manoel Island prompted the Museums department to contact the Institute of Nautical Archaeology for a comprehensive underwater archaeological survey in the areas where the piers were to penetrate the seafloor to the bedrock.

Thus, in April 2000, INA conducted an archaeological hazard survey around Manoel Island on behalf of TBA Periti & Associates and at the behest of the Malta Museums Department. A 14-meter hydrographic survey vessel outfitted with a high-resolution sub-bottom profiler, coupled to an advanced digital data collection system (CODA) and a precision global positioning system accurate to within 50 centimeters were used for this survey. Two gigabytes of sub-bottom profile data was collected, our efforts being focused predominantly on areas adjacent to the historic Quarantine Hospital building and the proposed site of the breakwater

construction as these areas were the most probable locations for potential disturbance of archaeological resources, and the largest area scheduled for seabed-modification.

Two known shipwrecks within the survey area and several other sub-bottom anomalies were detected within the general survey area, but none appeared to be at risk due to the construction of the breakwater, or the placement of floating docks. However, it was clear that, given the history of Manoel Island, there were most certainly small artifacts contained within the sediment and below the detection threshold of the equipment employed. One area of sub-bottom anomalies was investigated by divers and was found to contain archeological material ranging from Roman amphora/pottery fragments to modern debris (Fig. D.1). During the diver's inspections of the sub-bottom profiler targets, we also observed a high concentration of modern debris including tires, construction debris, and various non-descript metallic objects. Mixed in with the modern debris were fragments of ancient pottery. It was also noted that limited probing into the seabed revealed the existence of numerous buried objects in the area.

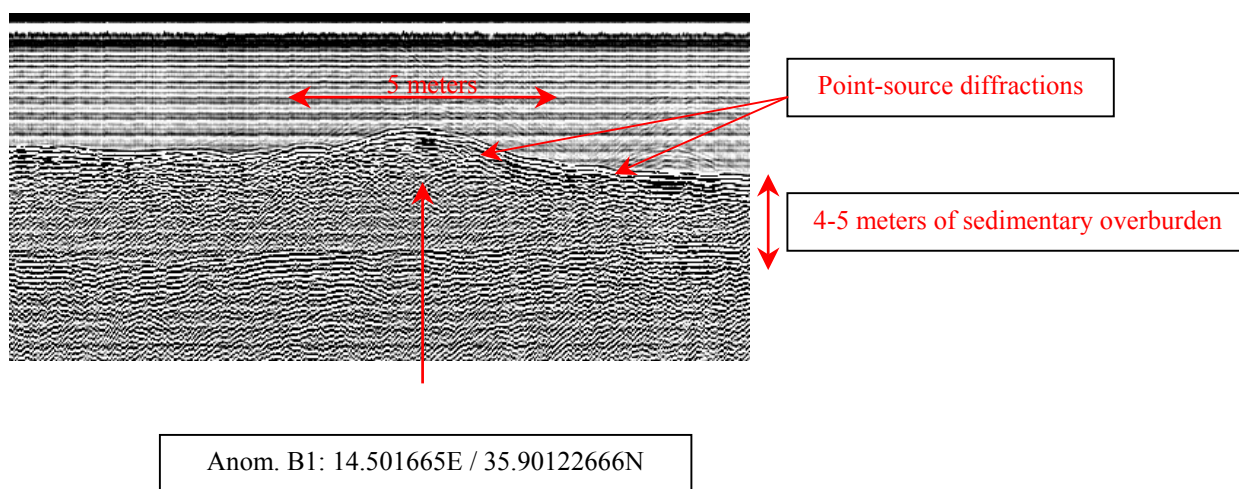


Fig. D.1. Sub-bottom profiler data showing the locations of the archaeological material detected during the survey.

Excavation Season of 2001

Additional diving investigation was planned for the area of high concentration of archaeological material that might represent a dredge spoil pushed towards the Hospital building (Fig. D.2). The abundance of artifacts near the Quarantine Hospital was also considered an impetus for further study in the area and an extended survey that involved systematic collection of the surface material and the excavation of a number of trenches was planned for the summer 2001.



Fig. D.2. Quarantine Hospital building seen from Valletta (photograph: author).

The underwater slope in front of the Quarantine Hospital is littered with furniture discarded from the building and large boulders that tumbled into the sea when the building was damaged by bombing during World War II. In addition to beds and boulders, the charm of the site is augmented by *Carolita*, a modern iron-hulled wreck attracting fish and sport divers to the area. *Carolita* looks almost haunted in the murky waters of the harbor; visibility is never higher than three meters provided that the bottom is not disturbed. The diving survey near the Quarantine Hospital proceeded under these circumstances and in two phases: (1) a systematic surface collection of archaeological material, and (2) the excavation of test trenches in the most promising areas. The team consisted of eight divers from INA, the National Museum of Archaeology, the University of Malta, and Bristol University.

The first dives focused on acclimating the team members to diving in zero-visibility and on the collection of archaeologically diagnostic surface material. After each dive a short meeting was held to familiarize the team members with the archaeological material recovered and to hone their skills of discernment. The surface material was mostly white porcelain used by the British Navy in the nineteenth and twentieth centuries, broken artifacts dating to the sixteenth and seventeenth centuries and a few late Roman – Byzantine sherds.

Once the surface survey data was analyzed the areas for excavation squares were selected. The squares were made of PVC pipes and measured 2 x 2 meters (labeled 1-4 in Fig. 7 in Chapter II). Each diver was assigned to a quarter of the square. The collection of the material from the squares started with photography and sketching. Divers were also responsible for labeling and on-site logging of the artifacts from their sections. A water dredge was set up to increase the speed of silt removal and to increase visibility. In addition to the squares, a number of up-slope sand pockets were excavated for they formed natural traps for material and had better stratification of artifacts preserved in-situ. Once the loose silt was removed the grayish

and more compact level that contained earlier artifacts was reached immediately, especially in the sand pockets. However, the layer approximately ½ meter below the gray silt preserved the traces of the roots of the poseidonia grass that only grows only on a sandy bottom, and dates approximately to the seventeenth century. Archaeological material from this layer yielded more consistent dates. The location of the squares and the excavated sand pockets were measured and positioned on a large-scale map and assigned precise geographical coordinates.

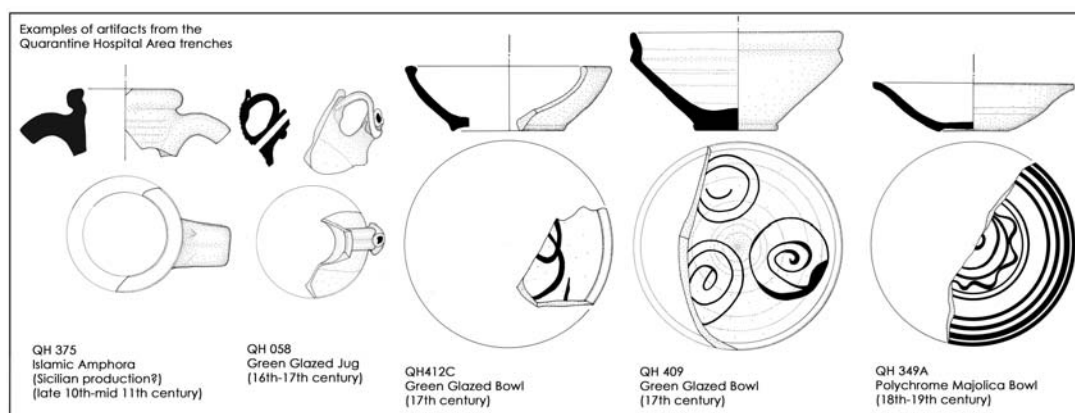


Fig. D.3. Examples of artifacts from the Quarantine Hospital Area trenches (drawing: author).

Preliminary Results

Ceramics from the excavation were cleaned, desalinated, reconstructed, photographed and drawn once the excavation was over. All 434 logged artifacts were entered into a database that allowed for comparison of the archaeological material in terms of their number, date and origin (Fig. D.3). Although ceramic studies are still being carried out, preliminary observations indicate that the eleventh and twelfth century Islamic ceramics (possibly of North African origin) outnumber the seventeenth to early nineteenth century polychrome Majolica sherds of the

'Knights' period, during which time the Quarantine Hospital was in active use. This points to an extensive use to the harbor during the medieval period. We look forward to the complete results of the pottery study to determine the contribution of this survey to our knowledge of the maritime history of Malta in the medieval period.

APPENDIX E

CHRONOLOGICAL TABLE SUMMARIZING THE MAJOR NAVAL UNDERTAKINGS OF THE ORDER OF SAINT JOHN, INFORMATION REGARDING THE NAVAL FORCES, AND THE MAJOR HISTORICAL EVENTS AFFECTING THE MEDITERRANEAN DURING THE PERIOD WHEN THE ORDER OF SAINT JOHN WAS BASED IN MALTA

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1523	The fleet left Rhodes	N/A	Sailing ships: <i>La Gran Nave</i> , <i>San Bonaventura</i> (Galleon ?), <i>Perla</i> (barque)	N/A	N/A	N/A		Rossi, <i>Storia della Marina</i> , p. 31.
1524	The three galleys capture two galliots belonging to the famous corsair Giudeo	Corsair activity	3 galleys: <i>Santa Maria</i> (<i>Capitana</i>), <i>Santa Caterina</i> , <i>San Giovanni</i>	Not mentioned	2 galliots, and 200 slaves	Not mentioned	Prizes brought to Citavecchia where the other ships were.	Rossi, <i>Storia della Marina</i> , p. 32.
1524	The size of the Venetian fleet: 24 galleys + 100 in reserve at the arsenal (until 1570). Spain: (maximum) 25 galleys, but hired Genoese when needed. In 1520 the Ottoman fleet that attacked Rhodes composed of 100 galleys +300 other vessels.							Petiet, <i>L'Ordre de Malte</i> , pp. 59, 61, 63.
October 26, 1530	Arrival of the Order in Malta	N/A	5 galleys: <i>Santa Maria</i> (<i>Capitana</i>), <i>Santa Caterina</i> , <i>San Giovanni</i> , + two galleys built in Villefranche, <i>San Filippo</i> and <i>San Giacomo</i> + Carracks <i>Santa Maria</i> and <i>Sant'Anna</i> , a ship called <i>La Marietta</i> , three barciotti, one transport ship, two brigantines, 700 soldiers					Rossi, <i>Storia della Marina</i> , pp. 33-34.
			5 galleys, 2 carracks, one galleon, the vessel named <i>Mariette de Rhodes</i> , and the vessel belonging to Bonaldi, 2 armed barciottis, 2 brigantins					Bosio, <i>Histoire de Malte</i> , 10.9. 297.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
August 17, 1531	Unsuccessful attempt to capture Modon	Attack on a land settlement	2 Hospitaller galleys + 2 Galleys of the famous privateer Cigale hired by the Grandmaster for this expedition + 2 brigantines and two merchant ships to carry provisions.	None	800 women	Fra Bernardo Salviati	The goal was to capture Modon because it was a location close to Rhodes. This Attack was part of l'Isle Adam's plan to recapture Rhodes. The report about an approaching Ottoman force forced the Order's forces to retreat but before leaving they plundered the houses of the town. 800 married women and maidens were taken as slaves from Modon in addition to the plunder described as "not over-honorable, tho' profitable" by Vertot.	Vertot, <i>The History</i> , 2:46-50; Bosio, <i>Histoire de Malthe</i> , 10.11.313-314; Rossi, <i>Storia della Marina</i> , p. 36; Mori Ubaldini, <i>La Marina</i> , pp. 134-37.
1531	Carrack <i>Santa Maria</i> destroyed in fire [according to Rossi she was only disarmed]	N/A	N/A	N/A	N/A	N/A		Dauber, <i>Die Marine</i> , p. 114; Rossi, <i>Storia della Marina</i> , p. 34
August 8, 1532	Charles V's Papal fleet under Andrea Doria's command (and including the Order's galleys) capture Coron	Naval activity in a Christian coalition fleet	The great carrack and 4 galleys.			Bernardo Salviati	Coron was chosen because the Christian forces refused to attack the better-fortified Modon, which had been looted the year before. Soldiers were underpaid and they needed the plunder to substitute their income.	Vertot, <i>The History</i> , 2:54-55; Brockman, <i>Last Bastion</i> , p. 172.
1534	Henry VIII seized the Order's properties in England, arresting most resident Knights	N/A	N/A	N/A	N/A	N/A		Vertot, <i>The History</i> , 2:60-61; Bosio, <i>Histoire de Malthe</i> , 11.12.328.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1534	The Order captured three 'Turkish' galleons near Djerba	Corsair activity				Fra Aurelio Bottigela		Bosio, <i>Histoire de Malthe</i> , 11.11.335; Rossi, <i>Storia della Marina</i> , p. 37; Mori Ubaldini, <i>La Marina</i> , pp. 140-41; Bono, "Naval Exploits," p. 354.
June 1535	Charles V led an armada of 400 ships and 30,000 men to invade Tunis (captured from its former ruler, Mullah Hasan by Khairuddin Barbarossa - the admiral of the Ottoman navy since 1533)	Naval activity in a Christian coalition fleet	The Order provided 4 galleys and the carrack <i>Sant' Anna</i>		100,000 inhabitants were killed or sold as slaves.		Barbarossa escaped	Vertot, <i>The History</i> , 2:63-72; Bono, "Naval Exploits," p. 353.
1535-1536	The first galley constructed in the Birgu arsenal, and in Malta – called <i>Santa Caterina</i>	Construction	N/A	N/A	N/A	N/A		Muscat, <i>The Maltese Galley</i> , p. 6.
1536	Captured two Muslim galliots near Sicily + one galleon carrying oil near Tripoli + one galliot near Djerba	Corsair activity				Fra Aurelio Bottigela		Bosio, <i>Histoire de Malthe</i> , 11.11.335-36; Rossi, <i>Storia della Marina</i> , p. 38; Bono, "Naval Exploits," p. 354.
1537	Two galliots and a fusta off Calabria – 80 slaves	Corsair activity				Leone Strozzi		Rossi, <i>Storia della Marina</i> , p. 39; Bono, "Naval Exploits," p. 354.
1538	Prevesa	Naval activity in a Christian coalition fleet	Knights were there in addition to Papal, Imperial, and Venetian vessels			Leone Strozzi		Rossi, <i>Storia della Marina</i> , p. 38.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1540	<i>Sant' Anna</i> (carrack) decommissioned because of financial difficulties and left to rot in the harbor – related to the decreasing income because of the loss of territories in England	N/A	N/A	N/A	N/A	N/A	Replaced by a ship of smaller tonnage.	Bosio, <i>Histoire de Malthe</i> , 12.6.355; Muscat, “The Warships,” p. 85.
1541	Siege of Algiers (Charles V's disastrous failure before Algiers)		400 Knights and 4 galleys [Vertot mentions the <i>Capitana</i> (bastarda) and La Catarinetta]				Unsuccessful expedition. 75 Knights and 400 soldiers died at Algiers. Besides, while the bulk of the fleet was in Africa, the Muslim corsairs attacked the island of Gozo capturing inhabitants. The papal fleet lost 15 galleys and 86 vessels in less than half an hour during a storm during the day of the fighting.	Vertot, <i>The History</i> , 2:86-90.
1545	A small village called Almaia or Lmaia to the west of Tripoli sacked. Rich booty	Corsair attack on a land settlement	4 galleys			Fra Signorino Gattinara	The goal was to capture the city but that goal was not achieved. Bono describes it as “partial success”	Bosio, <i>Histoire de Malthe</i> , 11.13.373; Bono, “Naval Exploits,” p. 382.
1549	The ship that replaced the carrack <i>Sant' Anna</i> is taken out of commission and replaced by two <i>galleonetti</i> (1500 salme each) due to increased financial difficulties	N/A	N/A	N/A	N/A	N/A		Bono, “Naval Exploits,” p. 378.
1550	Two merchant ships sunk in a storm							Dauber, <i>Die Marine</i> , p. 114.
1550	A fast sailing ship called <i>Catarinetta</i> loaded with money is taken by Dragut							Dauber, <i>Die Marine</i> , p. 114.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1550	Capture of Monastir and Mahdiya (both in Tunisia) by Charles V	Naval activity in a Christian coalition fleet	Andrea Doria: 54 galleys Giordano Orsino (Tuscany): 3 galleys Order of St. John: 4 galleys.			Fra Claude de Sengle	36 Knights died during the fight in Mahdiya.	Rossi, <i>Storia della Marina</i> , p. 42; Bono, "Naval Exploits," p. 354.
1551	The forces of Dragut devastated Gozo and also conquered the fortress of Tripoli						The knights, partly because the troops within the fortress had given way, offered only a very brief resistance.	Rossi, <i>Storia della Marina</i> , p. 42; Bono, "Naval Exploits," p. 354.
1552	Unsuccessful attack on Zuara		4 galleys: S. Claudio S. Michele Arcangelo, S. Maria Magdalena, S. Giovanni Battista, a galliot, a Fusta, brigantines and frigates.			Leone Strozzi	Small town to the west of Tripoli, attacked as part of a larger expedition aiming to reconquer Tripoli.	Bosio, <i>Histoire de Malthe</i> , 14.?.417, 327-32; Rossi, <i>Storia della Marina</i> , pp. 42-43; Mori Ubaldini, <i>La Marina</i> , pp. 178-80; Bono, "Naval Exploits," p. 354.
1554	The first galley built in the new Birgu arsenal is launched – a <i>Capitana</i> named <i>Santa Maria della Vittoria</i>	Construction						Muscat, "The Arsenal," p. 260.
1555	Capture of two vessels at Cape Misurata and another close to Malta	Corsair activity			Three vessels and 250 slaves (plus artillery and victuals)	Jean Parisot de la Vallette		Rossi, <i>Storia della Marina</i> , p. 43; Mori Ubaldini, <i>La Marina</i> , p. 186; Bono, "Naval Exploits," p. 356.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1555	Hurricane destroys galleys in the Grand Harbor	Natural disaster	4 galleys were capsized in the Grand Harbor, one is completely lost (<i>San Claudio</i>)	N/A	N/A	N/A	4 galleys were overturned in the Grand Harbor, losing their crews and rowers. Three were repaired but one of them had to be scrapped. The last one was replaced in the same year	Wismayer, <i>The Fleet</i> , pp. 107-108; Dauber, <i>Die Marine</i> , p. 115.
1555-1620	No galleys were built in Malta during this period	N/A	N/A	N/A	N/A	N/A		Muscat, "The Arsenal," p. 270.
1557	Capture of two heavy ships in the Levant	Private corsair activity				Mathurin de Lescaut, known as Romegas		Rossi, <i>Storia della Marina</i> , p. 44, Bono, "Naval Exploits," p. 357.
1558			Standing fleet of the Order consists of 5 galleys and two galleots					Dauber, <i>Die Marine</i> , p. 115.
1559-1560	Order's galleys took part in an expedition against Djerba, led by Philip II	Naval activity in a Christian coalition fleet	Five galleys, two galleons, one <i>Magistral</i> galliot and other minor craft + 400 Knights and 900 soldiers [total amount of vessels in the Christian force: 49-54 galleys]			Carlo Tessieres	Christians lost 28 galleys, half of the sailing ships, and nearly all the small craft were lost. Thousands of men, who were either killed or enslaved. Order's galleys returned but two of the galleys of the Order had suffered serious damage. Most important outcome: loss of trained manpower, crippling Spain for a long time.	Rossi, <i>Storia della Marina</i> , pp. 45-46; Mori Ubaldini, <i>La Marina</i> , pp. 202-26; Bono, "Naval Exploits," p. 355; Anderson, <i>Naval Wars</i> , pp. 12-13.
1563	Unsuccessful attack on Oran and Mers-al-Kebir							
1564	Order's galleys helped in the conquest of Peñón de Velez	Naval activity in a Christian coalition fleet	4 galleys					Rossi, <i>Storia della Marina</i> , pp. 43, 46-7; Mori Ubaldini, <i>La Marina</i> , pp. 182-83, 215-7; Bono, "Naval Exploits," p. 357.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1565			The number of galleys increased to 9 with the addition of the <i>Magistral</i> galley because of the feared siege of Malta.					Dauber, <i>Die Marine</i> , p. 115.
May-September 1565	Ottoman Siege			180 Turkish galleys and 40,000 men	In its broader Mediterranean context and within the framework of the Ottoman imperial design of extending Turco-Muslim influence to the west, the magnitude and consequence of the siege of Malta were ephemeral. It was a victory of hardly any lasting significance to long-term historical development. The Ottoman naval strength remained as formidable, its determination to realize its grand design as powerful, and its threat to the West as fearful as they had been in their totality before the armada had ventured on its politico punitive expedition to Malta.” (from Hess) The Genoese island of Chios, the fortress town of Szigeth in the southwest of Hungary, Tunis, the Venetian island of Cyprus, and Morocco each in turn bears visible witness to the audacious advance by the Ottomans in the decade or so after 1565. Within the narrower context of the history of the Order and the social and economic history of Malta, the repulsion of the Turks assumed a far more permanent significance. After the siege, the Knights drew one clear lesson from their close call. Both the area of the Three Cities on the eastern side of Grand Harbor and Fort Sant'Elmo on Draggut Point had proven vulnerable to battering from artillery set up on the heights of the Sciberras peninsula. The Knights determined to build a fortified enclave on those heights, and thus they gave birth to Valletta.			Hess, <i>The Forgotten Frontier</i> , pp. 84-90; de Groot, “The Ottoman Threat,” p. 199-254. Third paragraph: Mallia-Milanes, “Introduction to Hospitaller Malta,” p. 11.
1566	Capture of a ship with a cargo of spices	Private corsair activity (Hospitaller)			Spices and 90 men.	Captain Saint Aubain		Rossi, <i>Storia della Marina</i> , pp. 47-8; Bono, “Naval Exploits,” p. 357.
1567	Capture of two brigantines at Favignana and the attack of Zuaga between Tripoli and Zuara	Private corsair activity (Hospitaller)			60 slaves.	Mathurin de Lescaut, known as Romegas	Need for slaves to be employed for the construction of Valletta.	Rossi, <i>Storia della Marina</i> , pp. 44, Bono, “Naval Exploits,” p. 357
1568	Legislative measures enacted in 1568 prohibited the fitting out of ‘private’ galleys		The number of galleys reduced to 4					Bono, “Naval Exploits,” p. 379; Dauber, <i>Die Marine</i> , p. 115.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1568	Construction of a galleon in Malta		Construction of a galleon in the ditch under the bastion of France and Aragon.				Construction of a galleon in the ditch under the bastion of France and Aragon. From the context in Muscat, I understand that this was built in one year.	Muscat, "The Arsenal," p. 268.
1569 The event below with slight differences	Three galleys are lost at a battle off Sicily		Three galleys are lost.				King of Spain replaced these losses before Lepanto. Their participation was a decisive factor in the success of this campaign (i.e. Lepanto).	Dauber, <i>Die Marine</i> , p. 116. Bono, "Naval Exploits," p. 379.
July 15, 1570	The <i>Capitana</i> was driven ashore and was completely lost in Sicily by an Algerian enemy, the Calabrian renegade Luca Galeni (Uluch Ali or Occhiali or Lucciali). Two galleys <i>San Giovanni</i> and <i>Sant'Anna</i> were also lost	Unknown	The <i>Capitana</i> , and the two galleys <i>San Giovanni</i> and <i>Sant'Anna</i> were lost together with hundreds of fighting men (killed or carried away to Algiers). The only survivor was the Padrona, called the <i>Santa Maria della Vittoria</i> .	A galliot and..... ??		Captain General Francesco St. Clement	The galley squadron of the Order was painted vermilion but in 1625 the <i>Capitana</i> was painted black like the Spanish flagship and in commemoration of the St. Clement debacle at the hands of Uluch Ali's galliot. Upon his return to Malta St. Clement was court martialled and sentenced to be strangled and flung over the bastions into the sea. Also executed was Orlando Magri, the master of the <i>Capitana</i> , who had distinguished himself during the Siege of 1565	Wismayer, <i>The Fleet</i> , p. 16; Brockman, <i>Last Bastion</i> , p. 173.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1571	Naval battle of Lepanto	Naval activity in a Christian coalition fleet	The Order contributed only three galleys, the S. Maria della Vittoria, the S. Giovanni and the S. Pietro Holy league: 207 galleys and 6 galleasses	Ottoman force: 230 galleys and 70 galliots	Two galley hulls were the Order's share after the share of the spoils.	Under the command of Pietro Giustiniani. The knight Romegas was nominated Sovrintendente delle galere pontiflee by Marcantonio Colonna.	Loss of experienced manpower for the Ottomans (about 30,000 men were lost) – the death of a tradition. The Christian victory was more incisive in its psychological impact than in the military and strategic advantages. The Knights contributed a very small percentage of the total Christian force, but their galleys played a pivotal role from their initial position in the Christian reserve. When the Turkish left wing sailed through a gap opened by the imprudent action of Andrea Doria on the Christian right, the Knights helped to block the Turkish advance long enough to prevent a complete flanking and encirclement of the Christian center. That successful blocking action and the subsequent capture of the Ottoman flagship allowed the Christian fleet to claim victory in the battle.	Bono, "Naval Exploits," pp. 357-58.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
							Christians decisively defeated the Ottomans. Ironically, however, the results of military operations between 1569 and 1571 improved the strategic position of the Muslim empire. Ottoman soldiers cleared the southeastern Mediterranean of the Christian stronghold at Cyprus, consolidating their control over the sea routes that joined the wealthiest of the Arab lands (Egypt) to Istanbul. Ottoman sources give no indication that this defeat constituted a turning point in imperial self-confidence;	Hess, <i>The Forgotten Frontier</i> , p. 90.
After Lepanto	Ottomans increase their navy to 200 galleys	N/A	N/A	N/A	N/A	N/A		Hess, <i>The Forgotten Frontier</i> , p. 91.
1573			The number of galleys reduced to 4					Dauber, <i>Die Marine</i> , p. 116.
1574	Ottoman reconquest of Tunis and La Goletta – under the command of Eludj Ali – Uluc Ali?						Creates an equilibrium between the Christian and Muslim blocs both diverted away from the Mediterranean by the force of other more pressing problems elsewhere. The period that follows is characterized by the spread of piracy and an inferior war of corsairs. Major parties being the Knights Hospitallers and the Barbary Corsairs.	Bono, “Naval Exploits,” p. 358: Ciano, <i>Navi Mercanti</i> , p. 46.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1575-1577	The renowned corsair Romegas (Maturin de Lescaut) becomes the Captain General of the galley squadron	Corsair activity	4 galleys (in collaboration with three Tuscan galleys)			A barque, a maona, a galliot, large galliot, two caramursals are among the captured merchantman.		Rossi, <i>Storia della Marina</i> , p. 51.
1582	Grandmaster Verdalle fitted out one 'private' galley with papal approval		4 galleys + the <i>Magistral</i> galley + the galley belonging to the Knight Guinucci = total 6					Bono, "Naval Exploits," p. 379; Dauber, <i>Die Marine</i> , p. 116.
1584	The Venerable Council of the Order decided that the galley squadron was to maintain a fighting strength of five galleys		5 galleys					Rossi, <i>Storia della Marina</i> , p. 53.
1584	Corsair fleet of the Order is strengthened by the addition of two galleys, one galiote and one Brigantine		Corsair fleet of the Order is strengthened by the addition of two galleys, one galiote and one brigantine					Dauber, <i>Die Marine</i> , p. 116.
1586	Grandmaster Verdalle fitted out one more 'private' galley with papal approval							
1592	Galleon <i>San Giovanni</i> added to the <i>corso</i>	N/A	N/A	N/A	N/A	N/A		NLM Lib 413, ff. 225 in Muscat, "The Arsenal," pp. 87-88.
1592-1594	Ottoman main fleet + galleys from Bizerta (90-120 galleys) raid land settlements of Calabria and Sicily Source: Anderson, <i>Naval Wars</i> , p. 63.							

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1594	Ottoman Central Government issue a <i>ferman</i> (decree) to the governors of Algiers and the other two provinces, permitting them unlimited corsair activity	N/A	N/A	N/A	N/A	N/A		A document in the Ottoman State Archives [BBA MÜD (Mühimme Series of Registers) f. 212: <i>ferman</i> to Shaban Pasha of Algiers, in Ilter, <i>Şimali Afrikada</i> , 1: 181.
1595	Prohibition of 'private' galleys was reconfirmed by the election of Verdalle's successor, Grand Master Garzes	N/A	N/A	N/A	N/A	N/A		Bono, "Naval Exploits," p. 379.
1598	Addition of <i>Santo Stefano</i> Beginning of the Claramonte foundation		The permanent fund to support the galley <i>Santo Stefano</i> is provided by Bailiff Stefano de Claramonte.				Donated the sum of 12,000 <i>scudi</i> .	Dauber, <i>Die Marine</i> , p. 116.
1601	A great vessel, <i>Cigno</i> was bought	N/A	N/A	N/A	N/A	N/A	I am not sure what a <i>Cigno</i> is... but from the context in Muscat, I understand that this is a sailing cargo ship.	Dal Pozzo, <i>Historia della sacra</i> , 1: 458; Muscat, "The Arsenal," p. 268.
1600-1602	Captured six Muslim ships		Five galleys + ships from Naples, Sicily and Genoa.			Giacomo du Blot Viviers		Rossi, <i>Storia della Marina</i> , pp. 59, 62.
1601	Attack on Castelnovo (Morea)	Naval activity in a Christian coalition fleet	Four galleys (Naples, Sicily, Papal vessels, Savoy, Florence and Genoa are the other participants)		180 slaves (possibly shared)	Giacomo du Blot Viviers		Rossi, <i>Storia della Marina</i> , p. 59.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1601	Size of the Ottoman fleet: 45-50 galleys							Anderson, <i>Naval Wars</i> , pp. 67, 70-71, 75-76, 79-80, 85, 87; de Groot, "The Ottoman Threat," p. 208.
1602	Sack of Hammamet	Corsair attack on a land settlement	Five galleys		396 slaves	Giacomo du Blot Viviers		Rossi, <i>Storia della Marina</i> , p. 59; Vertot, <i>The History</i> , 2:60.
May 5, 1603	Attack and capture of Patras and Lepanto	Corsair attack on a land settlement	Five galleys and nine auxiliary vessels Dauber: 4 galleys, 1 galleon, two frigates, two freighters, 5 <i>Magistral</i> es (two galleons, two frigates, small transport ships) + ships from Naples, Sicily and Genoa.		392 slaves		The aim of capturing grain supplies which were thought to be stores in those citadels and which however turned out to be only false reports	Rossi, <i>Storia della Marina</i> , p. 62; Wismayer, <i>The Fleet</i> , p. 6; Dauber, <i>Die Marine</i> , p. 116.
1604	Sack of the island of Cos	Corsair attack on a land settlement			165 slaves			Vertot, <i>The History</i> , 2:60.
1604	Attack on La Goletta			3 of the 5 galleys are lost				Dauber, <i>Die Marine</i> , p. 116.
1604	Construction of <i>San Stefano</i>		Addition of <i>San Stefano</i> to the squadron				Constructed in Barcelona, financed by the 1598 Galley Foundation of Chevalier Stefano de Claramont (cost: 5,327 <i>scudi</i>)	Grima, "Galley Replacements," p. 49.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
	Construction of another <i>San Stefano</i> (II)		Addition of <i>San Stefano</i> II to the squadron				Constructed in <u>Malta</u> , financed by the 1598 Galley Foundation of Chevalier Stefano de Claramont (cost: 6,362 <i>scudi</i>)	
April 1606	Devastating storm wrecks three galleys off Tunis	Storm	The <i>Capitana</i> , the <i>San Michele</i> , and the <i>San Giorgio</i> – were wrecked. The <i>Padrona</i> named <i>San Giacomo</i> and the <i>San Luigi</i> managed to avoid sinking. The expedition was in cooperation with ships from Naples, Sicily and Genoa.			Captain-General Fra Bernardo de Speletta	Five galleys were lying in wait for Muslim vessels in a small bay in the island of Cimbalo (Zembra) in the Gulf of Tunis off Cape Bon, when the squadron was surprised by a violent storm. The <i>Capitana</i> , the <i>San Michele</i> , and the <i>San Giorgio</i> – were wrecked. The other two galleys – the <i>Padrona</i> named <i>San Giacomo</i> and the <i>San Luigi</i> managed to ride the storm safely to Trapani and Malta respectively. Forty knights, seventy Maltese soldiers and five hundred men were killed or taken prisoners by the subsequent Moorish attackers and all the slaves escaped	Dal Pozzo, <i>Historia della sacra</i> , 1:507-515; Rossi, <i>Storia della Marina</i> , pp. 60-62; Mori Ubaldini, <i>La Marina</i> , pp. 326-330; Bono, “Naval Exploits,” pp. 360-61.
	Several donors help the Order recover from this damage		King of Spain donated a new galley built at Naples and an old disarmed one from Palermo. In addition, a galley which the Order was building in Marseilles was soon brought into service.				But the naval activities in the following years are somehow restricted. Salvatore Bono, “Naval Exploits and Privateering,” in <i>Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of Saint John of Jerusalem</i> , ed. Victor Mallia-Milanes (Malta, 1993), pp. 361.	Dal Pozzo, <i>Historia della sacra</i> , 1:516; Rossi, <i>Storia della Marina</i> , p. 61; Mori Ubaldini, <i>La Marina</i> , pp. 66-67.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
			A further donation was made by Captain-General de Speletta himself, who gave 6,000 <i>scudi</i> to help defray the expenses for constructing a new <i>Capitana</i>					AOM 1759, f. 344r; AOM 1760, ff. 300r-v; both 12 May 1606.
			Chev. Fra Nicolo' Sciortino donated 300 <i>scudi</i>					AOM 1759, f. 344r; AOM 1760, ff. 300r-v; both 12 May 1606.
1609	Order's corsairs attack Lazajjo	Corsair activity	Chevaliers Fressenet, Maurot and Gaucourt surprise the fortress of Lazajjo in the gulf of that name, make their way into it by means of a peterd which blew up the gate; take a great booty, and after blowing up the fortifications of the place, carry off above 300 slaves. Note that no reference is made to the defeat at all...					Vertot, <i>The History</i> , 2:13, p. 60.
1609	Order's corsairs being attacked by the Ottoman patrol fleet	Corsair activity	Others [ships] belonging to "the Religion" in general, to the Grandmaster or individual Knights, had captured a few Turkish vessels and had raided Mitylene and Ayaz near Alexandretta with considerable success in the latter case. News of this reached the Kapudan Pasha, Khalil, on his way south along the coast of Asia Minor with some 50 galleys, and off Cyprus he came up with 3 galleons and a pinnace under a French Knight, Fressinet. The pinnace escaped, but the others, including Fressinet's great "Red Galleon" of 80 guns, were taken.					Anderson, <i>Naval Wars</i> , p. 75.
1609	A corsair galleon of 80 guns captured by the Ottoman fleet off Cyprus (north of Cyprus)	Corsair fleet flying Order's flag being attacked	3 galleons and a pinnace	50 galleys		Chevalier de Fressinet	Only the Pinnace escaped. French Knight Fressinet was killed. Bibliotheque Nationale, Paris {BN} ff. 7094, f. 248 (in de Groot, "The Ottoman Threat," p. 217) identifies d'Aubusson, de la Feuillade, de Cergis, Chamois, Pontac, St. Martin, and Wignacourt among the slaves brought to Constantinople.	Anderson, <i>Naval Wars</i> , p. 75.
1609	The prizes brought by the Ottoman fleet to Constantinople in this year	Privateering	50 galleys	5 galleons, 6 tartanes, 4 frigates, 540 slaves including a few Knights of Malta				Anderson, <i>Naval Wars</i> , p. 75; de Groot, "The Ottoman Threat," p. 217.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1611	Sack of Corinth	Corsair attack on a land settlement	Order's galleys and ships from Naples, Sicily and Genoa.		300 slaves			Rossi, <i>Storia della Marina</i> , p. 62.
1611	Kerkenna islands in the gulf of Sirte	Corsair attack on a land settlement	5 Hospitaller galleys + 30 others from other Catholic allies		180 slaves			Bono, "Naval Exploits," p. 361.
1612	Algiers disposed of six galleys and 60 sizeable sailing warships Tunis had six galleys and 14 big sailing ships Tripoli: two or three galleys							de Groot, "The Ottoman Threat," p. 211.
1613	Attack on the small settlement to the north of Smyrna, Phocaea	Corsair attack on a land settlement			18 women (25 men including three knights were lost during the expedition)	Alessandro, principle of Vendome, prior of Tolosa and natural son of Henry IV, king of France.		Rossi, <i>Storia della Marina</i> , pp. 62-63.
1613	Construction of galley <i>San Lorenzo</i>						4,812 <i>scudi</i> : materials 1,550 <i>scudi</i> : paid to workmen	AOM 458, ff. 296r-v, 21 February 1613 in Grima, "Galley Replacements," p. 49.
1614	Unsuccessful expedition without any major results		A total of 26 galleys including Order's galleys and ships from Naples, and Sicily.			Giovanni Angelo Centorio		Rossi, <i>Storia della Marina</i> , p. 63.
1614	A fleet of 80 Ottoman galleys were combined, to oppose the combined fleet of Naples, Sicily and Malta (a total of 25-27 ships). The Ottoman fleet sailed to Negropont, and than to Navarino searching for the enemy but could not find any. A raid upon the bay of Marsascala in Malta was undertaken with no major fighting or results. The fleet continued to Tripoli to take care of a domestic problem related to a rebellion there. Having re-established the authority of the Porte in north Africa Khalil Pasha returned to Navarino (passing through Malta with no events). The restoration of the Porte's authority in outlying provinces like Tripoli and the Morea had in itself already been a remarkable achievement							Anderson, <i>Naval Wars</i> , pp. 80-81; de Groot, "The Ottoman Threat," pp. 220-21.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1615	60 Turkish galleys land a force of 5,000 men to Malta but they are not able to enslave anyone as the population hides in the fortifications							Vertot, <i>The History</i> , 2:60.
1615	Some caramussals captured	Corsair activity				Giovanni Angelo Centorio		Rossi, <i>Storia della Marina</i> , p. 63.
1615	Construction of <i>San Lorenzo</i>		Addition of <i>San Lorenzo</i> to the squadron				Constructed in Barcelona, financed by the 1598 Galley Foundation of Chevalier Stefano de Claramont (Cost: 6,383 <i>scudi</i>)	Grima, "Galley Replacements," p. 49.
	Construction of another <i>San Lorenzo</i> (II)		Addition of <i>San Lorenzo</i> II to the squadron				Constructed in Malta, financed by the 1598 Galley Foundation of Chevalier Stefano de Claramont (cost: 6,127 <i>scudi</i>)	
1616	Two caramussals captured off Alexandria	Corsair activity	Squadron plus two galleys from Sicily			Giovanni Angelo Centorio	During the fighting 250 of the 'Turks' were killed and 362 were captured. Five knights and numerous Maltese were lost as well as the 72 of the Sicilians.	Rossi, <i>Storia della Marina</i> , p. 63.
December 26, 1617	Arrival of the galleon called the <i>Gran Galeone</i> to Malta							Dauber, <i>Die Marine</i> , p. 116; Muscat, "The Warships," p. 92; NLM 413, 168; see also Dal Pozzo, <i>Historia della sacra</i> , 1: 243, 634; Muscat, "The Arsenal," p. 268.
	Construction of a very beautiful galleon built in Amsterdam (Dauber) Construction of a Flemish galleon built for the Knights (Muscat)	N/A	N/A	N/A	N/A	N/A	According to Muscat this was: "the most stately and the strongest war machine that sailed in the Mediterranean at that time." It could carry 4,000 salme of grain.	
1618	Construction of galley <i>San Giovanni Battista</i> in Messina	N/A	N/A	N/A	N/A	N/A	Built in Messina 4,480 <i>scudi</i> : materials 1,804 <i>scudi</i> : wages	AOM 459, ff. 263v-264r, 7 January 1619, in Grima, "Galley Replacements," p. 49.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1619	Construction of galley <i>San Giovanni</i>		Addition of <i>San Giovanni</i> to the squadron				Built in Malta (Cost: 6,285 <i>scudi</i>)	AOM 109, f. 37v, 22 September 1627, in Grima, "Galley Replacements," p. 49.
1623	Capture of five Tunisian ships near Sardinia	Corsair activity			231 slaves		Surprise attack on these ships anchored near Island of San Pietro near Sardinia	Bono, "Naval Exploits," p. 364.
1625	Sack of Santa Maura	Corsair attack on a land settlement	5 Galleys, four frigates		178 slaves	Michele de Pontalier Tallamey		Rossi, <i>Storia della Marina</i> , p. 65.
1624	Three Tunisian vessels captured near Zembalo	Corsair activity	4 galleys and 10 galleys from Sicily		150 slaves			Bono, "Naval Exploits," p. 364; Rossi, <i>Storia della Marina</i> , p. 65.
June 1625	Loss of two galleys off Sicily (near Murro di Porco)		5 galleys	Six Bizertan galleys		Michele de Pontalier Tallamey	Two galleys, <i>San Francesco</i> and <i>San Giovanni</i> , were captured by the enemy and about 350 men were killed.	Dal Pozzo, <i>Historia della sacra</i> , 1: 739; Rossi, <i>Storia della Marina</i> , p. 65; Mori Ubaldini, <i>La Marina</i> , pp. 359-362; Dauber, <i>Die Marine</i> , p. 116; Muscat, "The Warships," p. 94.
		This setback prompted the Venerable Council to pass new ordinations concerning the number of men on board each galley and the qualifications of the Captains						AOM 108, f. 106v seq. and 113r, 16 July and 22 August 1625, in Grima, "Galley Replacements," p. 54.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
		The realization that the <i>Capitana's</i> scarlet colour (after the Spanish custom) made it an obvious and easier target. This practice was discontinued after this date and all the galleys were painted black. Dauber suggests that this was a sign of mourning						Dal Pozzo, <i>Historia della sacra</i> , 1: 744; Rossi, <i>Storia della Marina</i> , p. 66; Mori Ubaldini, <i>La Marina</i> , p. 363.
		The Bishop of Malta, Mgr. Baldassare Cagliares, immediately donated 3,000 <i>scudi</i> for the replacements of the lost ships						AOM 256, f. 32r, 27 June 1625. The Bishop's donation was <i>la rendita di Lentini che importa circo tre mila scudi</i> , in Grima, "Galley Replacements," p. 54; Rossi, <i>Storia della Marina</i> , p. 65.
		The Castellan of Amposta presented twelve slaves for service in the galleys						AOM 256, f. 32v, 29 June 1625, in Grima, "Galley Replacements," p. 54; Rossi, <i>Storia della Marina</i> , p. 65.
		Grand Master Antoine de Paule presented a further 30 slaves.						AOM 256, f. 32v, 30 June 1625, in Grima, "Galley Replacements," p. 54; Rossi, <i>Storia della Marina</i> , p. 65.
		The Viceroy of Sicily, Cardinal Giannettino Doria, presented the Order with a new galley hull.						AOM 256, f. 33r, 4 July 1625, in Grima, "Galley Replacements," p. 55; Rossi, <i>Storia della Marina</i> , p. 65.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
		Order's Receiver in Palermo, Chev. Fra Don Carlo Valdina – himself a future Captain-General of the Order's squadron – donated the sum of 2,000 <i>scudi</i> to be used for engaging <i>buonavoglie</i> to serve on the new galley						AOM 256, f. 33r, 4 July 1625, in Grima, "Galley Replacements," p. 55; Rossi, <i>Storia della Marina</i> , p. 65.
		Prior of Aquitaine, Chev. Fra Giacomo de Gaillarbois, donated the sum of 4,600 <i>scudi</i>						AOM 256, ff. 34v-35r, 27 July 1625, in Grima, "Galley Replacements," p. 55; Rossi, <i>Storia della Marina</i> , p. 65.
		The Order also played its part and imposed a levy of six months' income on all its goods						AOM 108, f. 108v, 17 July 1625, in Grima, "Galley Replacements," p. 55.
		A galley hull, kept for such an emergency at the Vittoriosa Arsenal, was hurriedly fitted out						Mori Ubaldini, <i>La Marina</i> , p. 362.
1626	Construction of a <i>Capitana</i>						Built in Malta (cost: 9,742 <i>scudi</i>)	AOM 109, f. 37v, 22 September 1627, in Grima, "Galley Replacements," p. 49.
1627	The strength of the squadron was increased to 6 galleys		6 galleys					AOM 256, f. 69r, 12 July 1627, AOM 1759, f. 322r, AOM 1760, f. 283r, in Grima, "Galley Replacements," p. 48.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1627	Exceptionally large and beautiful galley is given as a gift by Maria Magdalena of Tirol and Austria.	N/A	N/A	N/A	N/A	N/A		Dauber, <i>Die Marine</i> , p. 116.
1628	Two tripolitan vessels captured near Rhodes and two Tunisian ships near Licata	Corsair activity			Total of 329 slaves	Fra de Cremaulx		
1630	Sailing <i>Magistral</i> ship referred to as <i>Ammirante</i> appears in archival records.	N/A	N/A	N/A	N/A	N/A		Dauber, <i>Die Marine</i> , p. 116.
1631	Captain General of the galley squadron sanctioned an increase of 5 to 6 in the number of ships	N/A	N/A	N/A	N/A	N/A		Dauber, <i>Die Marine</i> , p. 119.
1632	The galley <i>San Giovanni</i> was wrecked in the Straits of Messina off the coasts of Calabria						This loss was counterbalanced by the donation of a galley hull, in 1634, by Chev. Fra Nicolo' Cavarretta Prior of Venice, and a similar gift by Chev. Fra Antonio Perdicomati in 1636.	AOM. 1759, f. 346v; AOM 1760, f. 302v; both 13 March 1634; AOM 111, f. 179v, 6 January 1636; Dal Pozzo, <i>Historia della sacra</i> , 2:12; Mori Ubaldini, <i>La Marina</i> , p. 68.
1632	A galley ordered at Messina shipyard	N/A	N/A	N/A	N/A	N/A	Construction cost is 5,500 <i>scudi</i> , a cheaper price than the construction in Malta (compare to <i>San Lorenzo</i> and <i>San Stefano</i> , built in Malta above)	AOM 110, f. 167r, 10 May 1632, in Grima, "Galley Replacements," p. 49.
1633	Four vessels captured near Zante	Corsair activity			650 slaves	Carlo Vandina		Bono, "Naval Exploits," p. 363; Rossi, <i>Storia della Marina</i> , p. 67.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1634	Five vessels captured near Cape Misurata to the east of Tripoli	Corsair activity			338 slaves	Carlo Vandina	5 knights, 32 soldiers and sailors were killed during the fighting.	Bono, "Naval Exploits," p. 363; Rossi, <i>Storia della Marina</i> , p. 67.
1638	Three Tripoli tan vessels captured near Calabria	Corsair activity			312 slaves		Near Roccella, under the command of Ibrahim Reis known as Baccazza.	Bono, "Naval Exploits," p. 364; Rossi, <i>Storia della Marina</i> , p. 67; Vertot, <i>The History</i> , 2:159-60.
1640	Attack on Santa Maura [Before the Crete campaign started in 1645 the Order went to assist the Venetians against the invading Turks]	Naval activity in a Christian coalition fleet (with Venetians)					Order's galley squadron lost 12 knights, 28 crew, 5 bionavoglia, 1 convict rower and 6 slaves	AOM 1768 ff. 136-138; Wismayer, <i>The Fleet</i> , pp. 52-53.
August 1640	Attack on La Goletta and capture of six galleys from Kara Khogia (Caracoggia)	?	6 galleys		6 galleys	Lodovico Langravio d'Assia		Bono, "Naval Exploits," p. 364; Rossi, <i>Storia della Marina</i> , pp. 67-68, AOM 257, ff. 56-57.
1641	Capture of three Turkish galliots near Rhodes	Corsair activity			200 Muslim and 34 Jewish merchants	Bernardo Vecchietti		Bono, "Naval Exploits," p. 363, Rossi, <i>Storia della Marina</i> , p. 68; Dal Pozzo, <i>Historia della sacra</i> , 2:55.
1642	The <i>Capitana</i> sank off Cape Passaro	Storm					Grand Duke of Tuscany donated a galley to the Order to replace it.	AOM 1759, ff. 346v-347r; AOM 1760, ff. 302v-303r; both 17 February 1642 in Bono, "Naval Exploits," p. 380.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
September 28, 1644	<p>Capture of an Ottoman ship (referred to as <i>Sultana</i> in the records, also referred to as a <i>galleon</i>) with passengers traveling from Constantinople to Alexandria.</p> <p>The Sultan was especially annoyed because one of his favorites in the harem and her baby son had been traveling in the ship.</p>	Corsair activity	6 galleys <i>Capitana, San Giovanni, San Giuseppe, Vittoria, San Lorenzo</i> and the <i>Santa Maria</i>	N/A	One Ottoman galleon + 380 men and women	Captain-General Boisbodrant	70 miles off Rhodes squadron under the command of Captain-General Boisbodrant saw ten ships coming, attacked two of them, sank one and captured the other one. The Captain General died.	AOM 1771 ff. 133-34 in Wismayer, <i>The Fleet</i> , pp. 54-59.
							This event ultimately led to the Order's involvement in the Cretan War. The Most Serene Republic of Venice and the Order of Saint John were mutually suspicious allies in this war. Venice blamed the Knights for having provoked Turkish aggression by seizing, in the autumn of 1644, a Turkish vessel in the Aegean and taking it to Crete, a colony of Venice since the thirteenth century. In reprisal Sultan Ibrahim had seemed at first to threaten an attack on Malta but had chosen Crete finally as the target of his revenge.	Allen, "The Order," p. 147.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
							The consequent attrition of trying to prevent Crete from falling completely to the Sultan's forces was to exhaust Venice and the Order of St. John during the twenty-four years of war. The beneficiaries of this conflict were to be the Dutch and English merchants who soon replaced the Venetians in exchanging their woolen cloths for raw silks from the Ottoman Empire.	Israel, <i>Dutch Primacy</i> , pp. 225-29.
1645-1669	Ottoman Venetian war of Candia	Naval activity in a Christian coalition fleet (with Venetians)	Order had 7 galleys ????	Ottoman force of 1645: 50 galleys and 7 transport vessels + 25 galleys from the province of Archipelago + 20 from Algiers, 5 from Tunis and 3 from Tripoli.		Flaminio Balbiani	Order's customary profits from its <i>corso</i> in the Levant were nullified by its galleys' participation in the protracted Ottoman Venetian war of Candia.	Allen, "The Order," p. 142; number of Ottoman ships: de Groot, "The Ottoman Threat," p. 225; Anderson, <i>Naval Wars</i> , pp. 140, 145, 151.
1646	The galley <i>Vittoria</i> was shipwrecked off the island of Capri.							AOM 1759, ff. 346v-347r; AOM 1760, ff. 302v-303r; 5 February 1646.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
Shortly after January 15, 1647	Capture of the Algerian 22 gun ship named <i>Bechir Hoggia</i> off Capo Passero	Corsair activity	6 galleys: <i>Capitana</i> , the <i>San Giovanni Padrona</i> , <i>Magistrale</i> , <i>Santa Maria</i> , <i>Santa Caterina</i> and <i>San Francesco</i>	N/A	22 gun ship named <i>Bechir Hoggia</i> 200 Algerians were taken as slaves		Squadron commander was shot during the fight Off Capo Passero	AOM 1769 ff. 212-213 in Wismayer, <i>The Fleet</i> , pp. 59-60.
	Dauber's report of the same event: He refers to the prize as a galleon, named <i>Kara Hogia</i>						Dauber mentions that this ship was fitted and put into service in Order's fleet.	Dauber, <i>Die Marine</i> , p. 119.
1649-1660	Size of the British fleet: 216 ships were added to the existing fleet of 50 ships and a few ketches (previous fleet of Charles I)	N/A	N/A	N/A	N/A	N/A		Allen, "The Order," p. 145.
1649	Order's estates confiscated by the Dutch Republic	N/A	N/A	N/A	N/A	N/A	These were included in the grand priory of Germany, and the Grand Prior of Germany, the Cardinal Landgrave of Hessen-Darmstadt tried to get an indemnity for these lands... I don't know if he was successful.	Allen, "The Order," p. 142.
1650	Three French Knights seize an English ship with a cargo belonging to a Maltese Ignatio Ribera outside the Grand Harbor	Private corsairs with the flag of the Order					Grandmaster Lascaris order them to return the ship to the English. This is an example of Order's forces sometimes being involved in fighting between European powers, and catholic vs. protestant fighting.	AOM 1554, despatch of 28 May 1650, in Allen, "The Order," p. 146.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1651	The standing fleet is increased to 7 galleys by Grandmaster Jean de Lascais. Funds are allocated for the sailing ship squadron		Seven galleys – a new galley called <i>Lascara</i> is added.					AOM 117, ff. 138v-129v, 140v-141v; AOM 222, ff. 166v-167r, 2 and 7 October 1651, in Grima, "Galley Replacements," p. 48; Also Dauber, <i>Die Marine</i> , p. 119.
April 1651	32 Turkish merchants and their merchandise captured by the Order's galleys as they were sailing in the British ship <i>Goodwill</i> through the Malta Channel	Corsair Activity					This creates major problems as the British protest the act, and the Bey of Tunis sequesters the property of all English merchants in Tunis. Ultimately the English freed these Turkish captives.	Allen, "The Order," p. 146.
1652	The Ottoman forces were at the time laying siege to Crete (Heraklion) which could only be supplied from the sea. In 1652 the Order had sent a squadron of seven galleys under the command of Bailiff Baldassar de Demandols	Naval activity in a Christian coalition fleet (with Venetians)	7 galleys Plus the Venetians	25 Ottoman galleys	N/A	Bailiff Baldassar de Demandols	While cruising off the Venetian island of Tine, the combined Venetian and Order's fleet gave chase to enemy. The Maltese squadron managed to overtake and cut off the fine galley of Ibrahim Kara Batak Bey of Malvasia which was taken prize	Wismayer, <i>The Fleet</i> , p. 6.
June 26, 1656	Again in conjunction of the Cretan situation Attempt to blockade the Ottoman fleet in the Dardanelles to prevent it from reaching the Aegean Sea. Known as the Battle of the Dardanelles	Naval activity in a Christian coalition fleet (with Venetians)	Six galleys Plus the Venetian ships: 24 galleys, 7 galleasses, 28 sailing ships under the command of the Venetian Admiral Lorenzo Morocello	70 galleys, 9 galleasses and 28 frigates	Two <i>maone</i> and a <i>bastarda</i> + 364 slaves	Captain General Caraffa	The Ottoman fleet under the command of a Kaptan Pasha, slipped successfully in the Aegean on June 23, 1656. After a second encounter with the chasing Christian fleet only 14 of the Ottoman ships could escape and 2,500 Christian slaves were freed.	Bono, "Naval Exploits," p. 366-367; Rossi, <i>Storia della Marina</i> , pp. 72-73.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
January 25, 1661	Capture of a large ship in the Malta Channel (?) by The squadron under the command of Prior of Bagnara, Fra Fabrizio Ruffo	Corsair activity	7 galleys The squadron was returning to Malta from Crete.	N/A	A large ship on her way from Tunis to Smyrna. The prize's value was estimated to be around 200,000 <i>scudi</i> .	Prior of Bagnara, Fra Fabrizio Ruffo	Pasha Adan was on board the ship. He has been on diplomatic missions to the Beys of Algiers, Tunis and Tripoli and was now returning. He was accompanied by the Khadi of Tunis who was with his son. These highly-placed dignitaries were to bring in a large ransom. A crew of 150 was also captured along with the cargo of caps, confectionary and camel-hair cloth.	AOM 1770 ff. 13-20 in Wismayer, <i>The Fleet</i> , pp. 60-61.
Summer 1661	Capture of four Ottoman galleys by the squadron near Milo	Corsair activity but in conjunction with Venetian ships.	7 galleys + the Venetian fleet consisting of 23 galleys, 6 galeasses and 30 square rigged vessels	N/A	Two galleys (Venetians took two of the galleys supposedly captured by the Order), four of the galley captains for ransoming purposes, and 600 slaves.	Prior of Bagnara, Fra Fabrizio Ruffo	The squadron under the command of Prior of Bagnara, Fra Fabrizio Ruffo joined the Venetian fleet in the Dodecanese archipelago looking out for a much larger Turkish fleet of 80 galleys. They ended up chasing another fleet coming from Rhodes and going to Canea and capturing four of these galleys.	AOM 1770 ff. 12-20 in Wismayer, <i>The Fleet</i> , pp. 61-63.
1664	The galley arsenal is equipped with three wooden sheds	N/A	N/A	N/A	N/A	N/A		Muscat, <i>The Maltese Galley</i> , p. 6.
1669	End of the war of Candia, Crete surrenders to the Ottomans							
April 5, 1671	Bringing ship-biscuits from the bakery in Augusta (Sicily)	Bringing in provisions		N/A	N/A	Prior Caraffa	Captain General of the squadron Prior Caraffa was summoned to the <i>Magistral</i> Palace in Valletta and was given his operational orders by Grandmaster Nicolas Cotoner	AOM 1767 f. 133 in Wismayer, <i>The Fleet</i> , p. 53.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1673	Capture of two galleons and two ships-of-the-line??? Near Rhodes	Corsair activity					Bono mentions that this is "the caravan of Tripoli."	Bono, "Naval Exploits," p. 368.
1675	English Admiral Sir John Narborough uses Malta as his base against the Tripolitan corsairs						Narborough's official complaints about the fact that his flag was not saluted.	Allen, "The Order," p. 152; also see Henry Teonge.
Between 1677 and 1680	An attack of a Barbary corsair towing a Christian prize off Tangier	Corsair activity	One galley	N/A	Unsuccessful (the enemy ship blew itself up)	Count Karl Johann von Königsmark (a gentleman volunteer)	After a long fight the enemy vessel's captain set fire to the powder magazine and blew up his own ship. Königsmark fell in the sea but was saved by his own crew. Because of his heroic act (in fighting I guess) Grand master Cotoner made him a Knight of <i>Magistral</i> Grace in spite of his different religious denomination	Engel, <i>Knights of Malta</i> , pp. 47-49
1682	Introduction of a fleet of sailing warships into the Ottoman fleet	N/A	N/A	N/A	N/A	N/A		de Groot, "The Ottoman Threat," p. 227.
1684-1699	War of Morea		Venice: 28 galleys, 6 galleasses, 24 sailing ships and other small craft + 7 galleys from Malta, 5 from the Papal states, 4 from Tuscany	Ottomans: 40 galleys, 16 sailing ships and other small craft. + 10 from Algiers, 6 from Tripoli and 2 from Tunis				
1685	Surrender of Coron	Naval activity in a Christian coalition fleet	7 galleys			334 slaves	Inhabitants of Coron shared among the allied forces.	Bono, "Naval Exploits," p. 369.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1685	End of the siege of Vienna by the Ottomans and the following Ottoman wars		Eight galleys (the number increased because of the war-like situation) added galley named: <i>Ottava</i> .					
1686	Capture of Navarino, Modon and Nauplia	Naval activity in a Christian coalition fleet						Bono, "Naval Exploits," p. 369; Rossi, <i>Storia della Marina</i> , pp. 78-79.
1687	Capture of Castelnuovo	Naval activity in a Christian coalition fleet						Bono, "Naval Exploits," p. 369; Rossi, <i>Storia della Marina</i> , pp. 78-79.
1690-97	During the reign of Grandmaster Adrien de Wignacourt the wooden sheds of the Birgu arsenal were replaced by the three arched barrel vaulted sheds							Muscat, <i>The Maltese Galley</i> , p. 6.
1695	The Ottoman flagship was a sailing ship	N/A	N/A	N/A	N/A	N/A		
1699	End of the War of Morea. Order is excluded from the peace talks						The Treaty of Karlowitz : Venice gained Dalmatia, the Morea and small islands. Lepanto and Prevesa were returned to the Ottomans. Hungary (including Transylvania but not the Banat of Temesvar), Croatia, and Slavonia were ceded to Austria by the Ottomans. Podolia passed to Poland. marked the beginning of the Ottoman Empire's disintegration.	de Groot, "The Ottoman Threat," p. 231; Dauber, <i>Die Marine</i> , p. 119. (just the fact that they were excluded).

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1700	Capture of a Muslim merchant ship called <i>Beneghem</i> off Lampedusa. According to Dauber the name of the ship is <i>Berenghemi</i> .	Corsair activity	4 galleys The <i>Capitana</i> and three others called <i>Santa Maria</i> , <i>San Luigi</i> and <i>Magistrale</i> (According to Dauber only two galleys capture the ship.)	N/A	1 sailing ship – 80 guns.	Captain General Spinola	A sailing ship was chased, attacked and captured off Lampedusa. The captured ship was re named as <i>San Giovanni</i> and kept as the first ship of the sailing warships squadron (Dauber's information).	AOM 1771 ff. 153-154 in Wismayer, <i>The Fleet</i> , pp. 46-50; Dauber, <i>Die Marine</i> , p. 119.
February 15, 1700	Sinking of the <i>Capitana</i> under the command of Captain General Spinola the Grand Prior of Messina off the eastern coast of Sicily close to the Correnti islands while attacking a Tunisian ship	Corsair activity	The galley squadron which is presumably formed of 7 galleys including one <i>San Paolo</i> that plays a role in the incident.	N/A	Unsuccessful	Captain General Spinola the Grand Prior of Messina	Two Tunisian sailing ships were seen sailing south. The flagship (<i>Capitana</i> ?) attacked one of these ships but some 700 men in this galley drowned when the galley "split open and sank under them" soon after they caught up with the Tunisian ship and before they boarded. The rest of the crew was saved by the galley <i>San Paolo</i> .	A letter by Bishop Ascania Bentivoglio (the Grand inquisitor and Ambassador of the Holy see in Malta) dated March 6, 1700 preserved in the Vatican Library marked Malta 51. Wismayer, <i>The Fleet</i> , p. 64.
17 January 1701	A special commission appointed by Grandmaster Ramon Perellos y Roccaful instituted the new squadron of the third rate ships, also taking the decision of reducing the number of galleys from eight to six		Number of galleys reduced to six.					Bono, "Naval Exploits," p. 381.
1701-1750	No galleys were built in Malta during this period	N/A	N/A	N/A	N/A	N/A	May be due to the introduction of the third rates.	Muscat, "The Arsenal," p. 270.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
July 24, 1701	Capture of one Tunisian <i>garbo</i> four miles off Cartagena.	Corsair activity	6 galleys	N/A	One <i>garbo</i> and her crew of 9 men	Captain-General Bailiff Spinola	Captain-General Bailiff Spinola and his fleet of 6 galleys hear about a number of small Muslim ships anchored at Cartagena and they capture one <i>garbo</i> four miles off Cartagena.	AOM 1771 ff. 156-157 in Wismayer, <i>The Fleet</i> , p. 6.
August 17, 1701	Capture of a Tunisian <i>salentino</i> and an <i>ondro</i> , which were at anchor at the harbor of La Goletta.	Corsair activity	6 galleys <i>Capitana, Padrona, San Paolo, San Pietro, San Antonio</i> and the <i>Magistrale</i> .	N/A	One <i>salentino</i> and one <i>ondro</i>	Captain-General Bailiff Spinola	Spinola's squadron finds the Tunisian boats that were reported to be anchored at Cartagena, but were not found to be there when searched. They were finally found at anchor at La Goletta and even though there are two Tunisian forts protecting this anchorage, the Order's galleys were able to take two of these little boats and burn two that were even smaller (an <i>ondro</i> and a <i>garbi</i> were burnt).	AOM 1771 ff. 156-157 in Wismayer, <i>The Fleet</i> , p. 6.
1704	Number of galleys reduced to 5		5 galleys					Bono, "Naval Exploits," p. 381.
1705	Two third rate ships constructed in Malta, and two in Toulon, and one captured from the Tunisians		Sailing ships: 5					Bono, "Naval Exploits," p. 381.
1709	<i>Capitana</i> of Tripoli was set on fire by a combined squadron of galleys and sailing ships	To defend Calabria	Not mentioned	Two galleys	350 slaves	De Langon	The squadron was ordered to stop these two Algerian ships from attacking Calabria.	Vertot, <i>The History</i> , 2:13, p. 106.
1716	Turkish war breaks out again and the Order's fleet is put into action. War ends with the peace of Passarowitz		Fleet reduced to 5 galleys, 2 sailing ships					Dauber, <i>Die Marine</i> , p. 119.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1720			Sailing ships: 3 Number of galleys reduced to 4				Reason: reduced number of prizes.	Bono, "Naval Exploits," p. 381; Rossi, <i>Storia della Marina</i> , pp. 85-86.
1732	Sailing ship squadron captures a large Ottoman ship	Corsair activity	Two sailing ships: <i>San Antonio</i> and <i>San Giorgio</i>	One large ship	42 cannons, 117 slaves	De Chambray		Rossi, <i>Storia della Marina</i> , pp. 86-87.
1743	Demi-galleys <i>Santa Anna</i> and <i>Santa Teresa</i> are added to the fleet							
October 1747	Galley squadron sent to Lampedusa as a punishment?	N/A	N/A	N/A	N/A	N/A	Grandmaster Pinto sent the galley squadron to Lampedusa as a punishment for entering the port of Messina for greasing while this city was under suspicion for plague.	Wismayer, <i>The Fleet</i> , p. 95.
1746	Francesco Messina was appointed to a new galley named <i>La Concezzione</i>	N/A	<i>Magistral</i> galley <i>La Concezzione</i>	N/A	N/A	Bailiff Fra. Fabrizio Ruffo <i>Magistral</i> Galley's commander iwas Fra. Gio. Batta Apfel (German).	N/A	Wismayer, <i>The Fleet</i> , p. 96.
February 1, 1748	Two galleys of the squadron are ordered by the Grandmaster Pinto to go and investigate the nationality of a strange looking galley sailing near Sicily.	N/A	A reference indicated that the Order's squadron had a total of 6 galleys at the time. Among them, <i>Padrona</i> and <i>Magistrale</i> .	N/A	N/A	N/A	It turns out that the galley was an Ottoman galley from Rhodes (called, I guess this means re-named, <i>Volpetta</i>) that was captured by its Maltese crew who took over the ship. These Maltese man were possibly rowing slaves before. Engel: pasha of Rhodes was on board. He was set free upon France's request, but than caused a slave rebellion.	NLM 466 ff. 1-212 in Wismayer, <i>The Fleet</i> , p. 101; Engel, <i>L'Ordre de Malte</i> , p. 214.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
June 29, 1748	During the slave revolt of this date the galley squadron had already left for the summer cruise, around the Italian coast and that was planned to last for four months.	N/A	Squadron: 4 galleys and 2 galiots Galleys in the squadron: <i>Capitana</i> , <i>San Nicola</i> , <i>San Luigi</i> and the Grandmaster's two galiots In addition, the <i>Magistrale</i> was in Malta.	N/A	N/A	N/A	This reference is in relation to the slave revolt of this date, which turned out to be unsuccessful.	NLM 466 ff. 1-212 (Francisco Messina's autobiography) in Wismayer, <i>The Fleet</i> , p. 102.
May 15, 1752	The squadron takes two Algerian <i>Xebecs</i> off Cap Bon.	Corsair activity	4 galleys.	N/A	Two Algerian <i>Xebecs</i> each armed with 14 cannons. 1,800 gold <i>Zecchini</i> on board shared amongst the four crews.	Bailiff Fra Francesco Parisio (January 7, 1751- January 6, 1753.	The squadron takes two Algerian <i>Xebecs</i> off Cap Bon.	NLM 466 ff. 1-212 (Francisco Messina's autobiography) in Wismayer, <i>The Fleet</i> , p. 102.
Jul 14, 1753	The strange incident of the French renegade who wanted to turn himself in with his two <i>Xebecs</i> .	N/A	4 galleys (the whole squadron) right after this voyage the <i>Capitana</i> is decommissioned.	N/A	N/A	Captain General Bailiff Fra Giovanni Battista D'Aflitto, Prior of Lombardy.	A French renegade (Acimussa??? Must be Haci Musa?) wrote to Grandmaster Pinto and said that he wanted to return to his old faith and join the order and turn in the two Algerian <i>Xebecs</i> that he had in his command. So the squadron went to Monte Calabro (between Spain and Majorca) to take over. But as the <i>Xebecs</i> approach the galleys of the Order think this is a trap and they run away back to Malta.	NLM 466 ff. 1-212 (Francisco Messina's autobiography) in Wismayer, <i>The Fleet</i> , pp. 104-107.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
4 January 1754	Charles VII (King of Naples becoming king of Spain in 1759 with the name of Charles III?) decided to interrupt all the relations (including commercial) with Malta putting the commanderies in Italy under sequester.	N/A	N/A	N/A	N/A	N/A		
1755 or 1757	Hurricane that destroyed many ships in harbor and many buildings around it.	Natural disaster	Galley squadron was escorting San Giovanni				Galley squadron was escorting San Giovanni that brought an ambassador of the Grandmaster to Naples to congratulate King Carlos on his accession to the throne of Spain. So the galleys were saved from the storm.	NLM 466 ff. 1-212 (Francisco Messina's autobiography) in Wismayer, <i>The Fleet</i> , p. 108.
1755 or 1756	Knights help the Bey of Tunis to defend himself against the Bey of Algiers (Busuaba?)	???	Galley squadron: <i>Capitana</i> , <i>Magistrale</i> , <i>San Luigi</i> and <i>San Nicola</i> + 2 ships of the line: <i>San Antonio</i> and <i>San Giovanni</i> (both 64 guns).		Tunisian vessels captured: 22 gun ship, a <i>tartana</i> , one large <i>pinque</i> and three smaller <i>pinques</i> .	Captain general Bailiff Fra De Rosset Fleury	Bey of Tunis presented gifts of food to the Grandmaster Pinto, who in turn accepted to provide him naval support in his struggle against the Algerians. Pinto sent his ships there and also convinced the 13 merchant ships (from Denmark, Sweden and Holland) that happened to be in the Grand harbor to go along so that the "armada" would look larger. 4 galleys and one sailing ship stayed there for 50 days. This refrained the Algerians from attacking La Goleta from the sea, so they captured it from land. After the fall of Tunis, the squadron captured the Tunisian ships that were at anchor at La Goleta, where they also were waiting.	NLM 466 ff. 1-212 (Francisco Messina's autobiography) in Wismayer, <i>The Fleet</i> , pp. 108-112.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1757	Algerian <i>xebec</i> at anchor captured and sold at Palamos	Corsair activity	?		Algerian <i>xebec</i>	Bailiff Fra Emmanuel de Rohan (becomes Grandmaster later)	15 miles off San Felipe (near Palamos, Spain)	NLM 466 ff. 1-212 (Francisco Messina's autobiography) in Wismayer, <i>The Fleet</i> , pp. 113-114.
September 14, 1760	A ship supposedly called <i>Corona Ottomana</i> – Ottoman Crown (80 guns) were captured by the Christian slaves on board while the Ottomans were on land collecting taxes. This crew brought the ship to Malta	Slave rebellion?	N/A	N/A	N/A	N/A	The ship was rebaptized as <i>San Salvador</i> and added to the squadron of the Order. However, later the Order was pressured to return the ship to the Ottomans by their ally France. Ultimately the ransom of 244,000 <i>scudi</i> was paid by France and the ship was sent back to Constantinople. It was manned by a Maltese crew who were brought back to Malta on a French ship after delivering the ship.	Hoppen, "Military Priorities," p. 400.
1763-1765	The squadron does not leave Malta		The <i>Capitana</i> was damaged in a storm in 1761 and was still not repaired				Bailiff Fra Giovanni Antonio Riquet de Mirabeau.	NLM 466 ff. 1-212 (Francisco Messina's autobiography) in Wismayer, <i>The Fleet</i> , pp. 116-117.
1765	The squadron's itinerary: Malta – Trapani – Cagliari – Malta. And the capture of a Tunisian <i>xebec</i>	Corsair activity	4 galleys <i>Capitana</i> , <i>Magistrale</i> , <i>San Nicola</i> , and <i>San Luigi</i> .	N/A	Tunisian <i>Xebec Polacca</i> (which is apparently a fast type of <i>xebec</i>)	Bailiff Fra Vittorio de Vachon de Belmont.	A <i>Xebec Polacca</i> , a Tunisian corsair ship of 22 guns was captured by the four galleys of the Order near Cagliari after three days of fighting. There is a description of this type of ship on page 119.	NLM 466 ff. 1-212 (Francisco Messina's autobiography) in Wismayer, <i>The Fleet</i> , pp. 117-119.
August 1767	They chase two Tunisian galleys and two galiots near Sardinia	Corsair activity	Squadron (presumably 4 galleys)			Bailiff Fra Eugene Clement Prince de Rohan	They chase two Tunisian galleys and two galiots near Sardinia but the ships sink in a storm. Nothing else happens that year.	NLM 466 ff. 1-212 (Francisco Messina's autobiography) in Wismayer, <i>The Fleet</i> , p. 120.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1769	The squadron entertains the King and Queen of Naples, his consort the Grand Duchess, the Ambassador of France and his wife and two other princesses who were friends of the Grand Duchess of Tuscany in Pozzuoli (near Naples), catching swans and conducting mock sea fighting	Entertainment	Squadron (presumably 4 galleys)			Bailiff Fra Eugene Clement Prince de Rohan	This is all happening because de Rohan had ulterior motives and wanted to make friends with the royalty.	NLM 466 ff. 1-212 (Francisco Messina's autobiography) in Wismayer, <i>The Fleet</i> , p. 121.
1770	The three galleys joined a French fleet on its way to Tunisia	Naval activity in a Christian coalition fleet (with French) French fleet of 2 frigates, 2 xebecs, and 2 bomb-ketches.	The whole squadron: 3 galleys (<i>Magistrale</i> was damaged so could not take part)	They only attacked land settlements.	None	Bailiff Fra Giovanni Baptista Baron von Fleischlander	This combined fleet bombarded Sousse and Bizerta.	NLM 466 ff. 1-212 (Francisco Messina's autobiography) in Wismayer, <i>The Fleet</i> , p. 122.
1772	Only two of the galleys (the other two being disabled because they were old) went to Corsica and came back	Regular patrol	The squadron of 4 galleys started but because the old <i>Capitana</i> was leaking it was left in <i>Cagliari</i> along with <i>San Nicola</i> to accompany. Therefore only <i>Magistrale</i> and <i>Vittoria</i> continued.			Bailiff Fra Charles Antoine de la Tour de St. Quentin	Nothing was accomplished and especially after a storm between Cagliari and Malta they were happy enough to be alive.	NLM 466 ff. 1-212 (Francisco Messina's autobiography) in Wismayer, <i>The Fleet</i> , pp. 122-123.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1774	A year characterized by the removal of coffee and chocolate from the officer's fare. Ration scale and the crew pay were also diminished		4 galleys: <i>Capitana</i> (capt. Chevalier d'Hannonville), <i>Magistrale</i> (capt. Chevalier De Roziers), Padrona (Chevalier Requeziens), San Pietro (capt. Chevalier Reario)					NLM 466 pp. 169, 176, 177 in Wismayer, <i>The Fleet</i> , p. 125.
1784-1792	Venetians attack Tunis and make an arrangement with the Order to use Malta as a base. The order grants permission for the full use of its ports, storage facilities, dockyards, barracks accommodation and the hospital. The stay of the Venetian fleet in Malta vitalizes trade		Sailing ship San Giovanni and two frigates contributed to the Venetian force.					Bono, "Naval Exploits," p. 376.

Date	Event	Descriptor	Number of Order's ships	Number of enemy ships	In the case of corsair activity # of prizes	Captain General (or privateer captain)	Outcome	Source
1798	The Order's fleet: 4 galleys, 2 demi-galleys, 2 line ships, 2 frigates		2 galleys (<i>S. Luigi</i> , <i>Magistral galley S. Nicola</i>), 2 demi galleys, 2 sailing ships (<i>San Zaccaria</i> and <i>San Giovanni</i> – later named as <i>Dego</i> and <i>Berousse</i> in the French navy), 2 frigates (<i>San Zaccaria</i> , <i>Santa Elisabetta</i> – named as <i>Atheniese</i> and <i>Cartaginese</i> in the French navy).					Bono, "Naval Exploits," p. 377; Rossi, <i>Storia della Marina</i> , pp. 93-94.

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M.A. (Archaeology)	Bilkent University (Ankara, Turkey) 1997
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PUBLICATIONS

2002	“Archaeological Survey of the Maltese Archipelago, 2001,” <i>INA Quarterly</i> 29.2.
2002	“High-Tech Underwater Surveying Techniques and Applications in Underwater Archaeology,” <i>Marine Technology Society Journal</i> 36.3.
2001	“Preliminary Survey of the Iskenderun Bay, Turkey,” <i>INA Quarterly</i> 28.2.
2001	“Underwater Survey of Malta – The Reconnaissance Season of 2000,” Ayşe Devrim Atauz and John McManamon - <i>INA Quarterly</i> 28.2.
2000	"Survey of the Valletta Harbors in Malta 1999," <i>INA Quarterly</i> 27.1

ARCHAEOLOGICAL FIELD WORK (partial list)

2002	Underwater Survey off Portugal (Project Director - ProMare)
2001	Underwater ROV and Diving Survey of the Maltese Archipelago (Director)
2000	Underwater Survey of the Iskenderun Bay, Turkey (Project Director)
2000	Underwater Survey of Maltese Islands (INA Research Associate-Field Director)
1999	Valetta Harbor Survey, Malta (INA Research Associate-Field Director)
1999	Black Sea Trade Project, Sinop, Turkey (INA Research Associate-Staff Archaeologist)
1999	Tektas Burnu Classical Shipwreck Excavation, Izmir, Turkey (Archeologist)
1997	Bozburun Shipwreck Excavation, Muğla, Turkey (Archaeologist)
1997	Aperlae Harbor Survey, Üçağız, Antalya, Turkey (Ceramics Specialist)
1996	Bozburun Shipwreck Excavation, Muğla, Turkey (Archaeologist –Conservator)
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